

Proboszcz, Angie

From: Irving, Bill
Sent: Monday, January 04, 2016 1:39 PM
To: DeFigueiredo, Mark; Weitz, Melissa
Cc: Waltzer, Suzanne; Hockstad, Leif; Banks, Julius; McKittrick, Alexis
Subject: RE: Massive methane leak in CA

Follow Up Flag: Follow up
Flag Status: Flagged

Thanks Mark – I think we're covered for State Dept, but it's really useful to have this background.

I think [REDACTED]
[REDACTED]

From: DeFigueiredo, Mark
Sent: Monday, January 04, 2016 3:37 PM
To: Irving, Bill <Irving.Bill@epa.gov>; Weitz, Melissa <Weitz.Melissa@epa.gov>
Cc: Waltzer, Suzanne <Waltzer.Suzanne@epa.gov>; Hockstad, Leif <Hockstad.Leif@epa.gov>; Banks, Julius <Banks.Julius@epa.gov>; McKittrick, Alexis <McKittrick.Alexis@epa.gov>
Subject: RE: Massive methane leak in CA

Yes, in general underground natural gas storage is covered by Subpart W, including equipment leaks. However I don't believe [REDACTED]
[REDACTED]

1) [REDACTED]
[REDACTED]
[REDACTED]

This is obviously in the weeds. I think Melissa's response was good if you feel you need to reply to the incoming email.

Best – Mark

--

Mark de Figueiredo, J.D., Ph.D.
Climate Change Division
U.S. Environmental Protection Agency
Office: (202) 343-9928
Mobile: (202) 251-4951
Email: defigueiredo.mark@epa.gov

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Cc: Waltzer, Suzanne <Waltzer.Suzanne@epa.gov>; Hockstad, Leif <Hockstad.Leif@epa.gov>
Subject: RE: Massive methane leak in CA

Many thanks. Is it also covered under W?

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Cc: Waltzer, Suzanne <Waltzer.Suzanne@epa.gov>; Hockstad, Leif <Hockstad.Leif@epa.gov>
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We do. We include storage facility emissions, and storage well fugitive emissions specifically.

In 2013, CH₄ emissions from the storage segment were around 400,000 tons CH₄ (10 MMT CO₂e) and fugitive CH₄ emissions from storage wells were around 15,000 tons CH₄ (0.4 MMT CO₂e).

The leaking Aliso Canyon well has emitted about 90,000 tons CH₄ (2 MMT CO₂e) since October. If it is stopped in March (this is the most recent estimate I've heard), it will have emitted about 180,000 tons CH₄ (4.5 MMT CO₂e).

So, the leak from this well is much larger than the total emissions from storage wells in the inventory.

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FYI – I'm not sure David's last statement is accurate. Don't we include emissions from storage facilities in the inventory?

From: Reidmiller, David R [<mailto:ReidmillerDR@state.gov>]
Sent: Monday, January 04, 2016 10:57 AM
To: Stern, Todd D (S/SECC) <SternTD@state.gov>; Talley, Trigg <TalleyT@state.gov>; Lattimer, Timothy P <LattimerTP@state.gov>; Florini, Karen L <FloriniKL@state.gov>; Cerqueira, Julie <CerqueiraJ@state.gov>; Hochstrasser, Franz J. <HochstrasserFJ@state.gov>; Sierawski, Clare S <SierawskiCS@state.gov>; Schuler, Reed M <SchulerRM@state.gov>; Akhtar, Farhan H <AkhtarFH@state.gov>; Strait, Elan P <StraitEP@state.gov>; Rakestraw, Andrew R <RakestrawAR@state.gov>
Cc: Irving, Bill <Irving.Bill@epa.gov>; LeFranc, Maurice <LeFranc.Maurice@epa.gov>
Subject: Massive methane leak in CA

Todd et al –

You may very well have heard about this already, but I wanted to flag for your situational awareness.

For the past several months, there has been a massive methane leak in southern California. Some have likened it to an “invisible BP oil spill”. Scientists at NASA’s Jet Propulsion Lab (and others) have been tracking the leak, but stopping it – not unlike BP – poses serious technical challenges. If this leak were to continue for an entire year - at the current rates cited below (and if all the gas being leaked is methane) - it would emit roughly 0.4 Mt CH₄ or approx. 11 Mt CO₂e (<0.2% of current net US emissions, but roughly the annual emissions of Moldova or Luxembourg or Jamaica). It’s unclear how or whether EPA will be able to incorporate this in future inventories as it is not exactly a traditional source included in their methodologies.

MASSIVE CALIF. GAS LEAK WON'T BE PLUGGED FOR MONTHS: SoCal Gas will need at least two more months to fix a gas leak that is spewing natural gas into the air at the rate of 100,000 lbs/hr, according to [local news reports](#). The leak of the Aliso Canyon storage facility was discovered in October, and fixing it will require SoCal Gas to drill relief wells 8,500 feet into the ground to get beneath the ruptured pipeline to implement a fix. SoCal Gas has had to help 2,157 households relocate, and it's working on moving 1,184 more, [according](#) to the Wall Street Journal. The EPA will begin an [investigation](#) at the behest of Rep. Brad Sherman, whose district includes Porter Ranch. The South Coast Air quality Management District, which enforces state and federal clean air laws in the region, will hold a hearing next week.

http://motherboard.vice.com/read/why-we-cant-stop-the-enormous-methane-leak-flooding-la?utm_source=mbfb

David Reidmiller, PhD

Chief Climate Scientist

U.S. Department of State

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Mobile: +1-202-341-4709

reidmillerdr@state.gov

<http://www.state.gov/e/oes/climate/index.htm>

Proboszcz, Angie

From: Gunning, Paul
Sent: Wednesday, December 09, 2015 8:08 AM
To: Banks, Julius
Cc: Weitz, Melissa; DeFigueiredo, Mark; Kocchi, Suzanne
Subject: RE: Massive underground CH4 leak in CA?

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Thanks Julius

From: Banks, Julius
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To: Gunning, Paul <Gunning.Paul@epa.gov>
Cc: Weitz, Melissa <Weitz.Melissa@epa.gov>; DeFigueiredo, Mark <DeFigueiredo.Mark@epa.gov>; Kocchi, Suzanne <Kocchi.Suzanne@epa.gov>
Subject: RE: Massive underground CH4 leak in CA?

I will check around and get back to you tomorrow.

Thanks,

Julius

From: Gunning, Paul
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Cc: Weitz, Melissa <Weitz.Melissa@epa.gov>; DeFigueiredo, Mark <DeFigueiredo.Mark@epa.gov>; Kocchi, Suzanne <Kocchi.Suzanne@epa.gov>
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Julius – Since methane is not a regulated pollutant yet, I doubt there is anything at the federal level (at least from a CAA stationary source perspective) but there might be something at the state level. Anyway, is this something you can follow up on? I imagine you may have a contact or two from your OECA days.

Thanks!

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Cc: Kocchi, Suzanne <Kocchi.Suzanne@epa.gov>; DeLuca, Isabel <DeLuca.Isabel@epa.gov>; Friedman, Kristina

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From: Dunham, Sarah

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To: Gunning, Paul <Gunning.Paul@epa.gov>

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Are we trying to find out more about this?

From: [Gunning, Paul](#)

Sent: 11/21/2015 10:51 AM

To: [Dunham, Sarah](#)

Subject: Fwd: Massive underground CH4 leak in CA?

FYI

Paul M Gunning
202-251-1436

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Cc: Kocchi, Suzanne;DeLuca, Isabel;Friedman, Kristina;Banks, Julius
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Follow Up Flag: Follow up
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No we have not, but we will reach out. There may be something at the state-level, but nothing I know of from a federal standpoint.

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Best – Mark

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Mark de Figueiredo, J.D., Ph.D.
Climate Change Division
U.S. Environmental Protection Agency
Office: (202) 343-9928
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Subject: FW: Massive methane leak in CA

FYI – I'm not sure David's last statement is accurate. Don't we include emissions from storage facilities in the inventory?

From: Reidmiller, David R [<mailto:ReidmillerDR@state.gov>]
Sent: Monday, January 04, 2016 10:57 AM
To: Stern, Todd D (S/SECC) <SternTD@state.gov>; Talley, Trigg <TalleyT@state.gov>; Lattimer, Timothy P <LattimerTP@state.gov>; Florini, Karen L <FloriniKL@state.gov>; Cerqueira, Julie <CerqueiralJ@state.gov>; Hochstrasser, Franz J. <HochstrasserFJ@state.gov>; Sierawski, Clare S <SierawskiCS@state.gov>; Schuler, Reed M <SchulerRM@state.gov>; Akhtar, Farhan H <AkhtarFH@state.gov>; Strait, Elan P <StraitEP@state.gov>; Rakestraw, Andrew R <RakestrawAR@state.gov>
Cc: Irving, Bill <Irving.Bill@epa.gov>; LeFranc, Maurice <LeFranc.Maurice@epa.gov>
Subject: Massive methane leak in CA

Todd et al –

You may very well have heard about this already, but I wanted to flag for your situational awareness.

For the past several months, there has been a massive methane leak in southern California. Some have likened it to an "invisible BP oil spill". Scientists at NASA's Jet Propulsion Lab (and others) have been tracking the leak, but stopping it – not unlike BP – poses serious technical challenges. If this leak were to continue for an entire year - at the current rates cited below (and if all the gas being leaked is methane) - it would emit roughly 0.4 Mt CH₄ or approx. 11 Mt CO₂e (<0.2% of current net US emissions, but roughly the annual emissions of Moldova or Luxembourg or Jamaica). It's unclear how or whether EPA will be able to incorporate this in future inventories as it is not exactly a traditional source included in their methodologies.

MASSIVE CALIF. GAS LEAK WON'T BE PLUGGED FOR MONTHS: SoCal Gas will need at least two more months to fix a gas leak that is spewing natural gas into the air at the rate of 100,000 lbs/hr, according to [local news reports](#). The leak of the Aliso Canyon storage facility was discovered in October, and fixing it will require SoCal Gas to drill relief wells 8,500 feet into the ground to get beneath the ruptured pipeline to implement a fix. SoCal Gas has had to help 2,157 households relocate, and it's working on moving 1,184 more, [according](#) to the Wall Street Journal. The EPA will begin an [investigation](#) at the behest of Rep. Brad Sherman, whose district includes Porter Ranch. The South Coast Air quality Management District, which enforces state and federal clean air laws in the region, will hold a hearing next week.

http://motherboard.vice.com/read/why-we-cant-stop-the-enormous-methane-leak-flooding-la?utm_source=mbfb

David Reidmiller, PhD

Chief Climate Scientist

U.S. Department of State

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Mobile: +1-202-341-4709

reidmillerdr@state.gov

<http://www.state.gov/e/oes/climate/index.htm>

Proboszcz, Angie

From: Banks, Julius
Sent: Wednesday, December 16, 2015 5:45 PM
To: Gunning, Paul
Subject: Re: Massive underground CH4 leak in CA?

Follow Up Flag: Follow up
Flag Status: Flagged

Paul,

Here's the latest update from Wednesday.

R9 is monitoring the situation and working cooperatively with SCAQMD to address the massive methane leak at Aliso.

SCAQMD is proceeding with an "Order of Abatement" which is their most aggressive enforcement response under rules of their governing Board.

SCAQMD has already issued an NOV and the City of LA filed a suit against the company last week based on "nuisance and unfair business practices" under California law. The State oil& gas regulatory agency (DOGGR) issued an emergency order requiring data about the well and killing it.

OGC and OECA are looking into possible CAA 112r authority. We may have to defer to DOT as they govern emissions from leaks related to gas transport.

Julius

On Dec 15, 2015, at 9:11 AM, Gunning, Paul <Gunning.Paul@epa.gov> wrote:

Thanks Julius!! This is great.

Paul

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[REDACTED]

[REDACTED]

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[REDACTED]

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[REDACTED]

From: Gunning, Paul
Sent: Monday, December 14, 2015 12:22 PM
To: Banks, Julius <Banks.Julius@epa.gov>
Subject: FW: Massive underground CH4 leak in CA?

Julius – I just wanted to check back in to see if you were able to get any additional info.? Let me know.

Thanks

Paul

From: Gunning, Paul
Sent: Wednesday, December 09, 2015 11:08 AM
To: Banks, Julius <Banks.Julius@epa.gov>
Cc: Weitz, Melissa <Weitz.Melissa@epa.gov>; DeFigueiredo, Mark <DeFigueiredo.Mark@epa.gov>; Kocchi, Suzanne <Kocchi.Suzanne@epa.gov>
Subject: RE: Massive underground CH4 leak in CA?

Thanks Julius

From: Banks, Julius
Sent: Wednesday, December 09, 2015 11:02 AM
To: Gunning, Paul <Gunning.Paul@epa.gov>
Cc: Weitz, Melissa <Weitz.Melissa@epa.gov>; DeFigueiredo, Mark <DeFigueiredo.Mark@epa.gov>; Kocchi, Suzanne <Kocchi.Suzanne@epa.gov>
Subject: RE: Massive underground CH4 leak in CA?

I will check around and get back to you tomorrow.

Thanks,

Julius

From: Gunning, Paul
Sent: Wednesday, December 09, 2015 10:52 AM
To: Banks, Julius <Banks.Julius@epa.gov>
Cc: Weitz, Melissa <Weitz.Melissa@epa.gov>; DeFigueiredo, Mark <DeFigueiredo.Mark@epa.gov>; Kocchi, Suzanne <Kocchi.Suzanne@epa.gov>
Subject: FW: Massive underground CH4 leak in CA?

Julius – Since methane is not a regulated pollutant yet, I doubt there is anything at the federal level (at least from a CAA stationary source perspective) but there might be something at the state level. Anyway, is this something you can follow up on? I imagine you may have a contact or two from your OECA days.

Thanks!

Paul

From: Dunham, Sarah
Sent: Wednesday, December 09, 2015 10:41 AM
To: Krieger, Jackie <Krieger.Jackie@epa.gov>; Gunning, Paul <Gunning.Paul@epa.gov>
Cc: Kocchi, Suzanne <Kocchi.Suzanne@epa.gov>; DeLuca, Isabel <DeLuca.Isabel@epa.gov>; Friedman, Kristina <Friedman.Kristina@epa.gov>
Subject: RE: Massive underground CH4 leak in CA?

Did we ever find out any more about this? Have we talked to the Region and OECA? It would be good to know the regulatory/compliance context, not just the emissions inventory implication.

From: Krieger, Jackie
Sent: Wednesday, December 09, 2015 10:36 AM
To: Gunning, Paul <Gunning.Paul@epa.gov>; Dunham, Sarah <Dunham.Sarah@epa.gov>
Cc: Kocchi, Suzanne <Kocchi.Suzanne@epa.gov>; DeLuca, Isabel <DeLuca.Isabel@epa.gov>; Friedman, Kristina <Friedman.Kristina@epa.gov>
Subject: RE: Massive underground CH4 leak in CA?

Apparently Janet and Michael Bradley have connected in Paris and Bradley wants to come in and meet with folks here next week to discuss the Aliso Canyon storage facility leak – their group to include So Cal Gas, Sempra, and Bradley’s people. So you may get a meeting invitation – Janet may not be able to attend so it will OAP and OAQPS.

From: Gunning, Paul
Sent: Monday, November 23, 2015 9:22 AM
To: Dunham, Sarah <Dunham.Sarah@epa.gov>
Cc: Kocchi, Suzanne <Kocchi.Suzanne@epa.gov>; Krieger, Jackie <Krieger.Jackie@epa.gov>; DeLuca, Isabel <DeLuca.Isabel@epa.gov>
Subject: RE: Massive underground CH4 leak in CA?

Sarah –

More info. on the Aliso Canyon storage facility leak. The first link is to a local story that ran on Friday. The leak is at an underground storage facility owned and operated by SoCal Gas and has been ongoing now for over a month. The second link is to a draft report - CARB’s preliminary estimate of the leak’s methane emissions is 0.8 million metric tons CO2e.

<http://www.nbclosangeles.com/news/local/SoCal-Gas-Ordered-to-Relocate-Residents-Due-to-Gas-Leak-in-Porter-Ranch-352475461.html>

<http://documents.latimes.com/report-greenhouse-gas-emissions-aliso-canyon-leak/>

From: Dunham, Sarah
Sent: Saturday, November 21, 2015 11:14 AM
To: Gunning, Paul <Gunning.Paul@epa.gov>
Subject: RE: Massive underground CH4 leak in CA?

Are we trying to find out more about this?

From: [Gunning, Paul](#)
Sent: 11/21/2015 10:51 AM
To: [Dunham, Sarah](#)
Subject: Fwd: Massive underground CH4 leak in CA?

FYI

Paul M Gunning
202-251-1436

Begin forwarded message:

From: "Irving, Bill" <Irving.Bill@epa.gov>
Date: November 21, 2015 at 8:01:29 AM EST
To: "Weitz, Melissa" <Weitz.Melissa@epa.gov>, "DeFigueiredo, Mark" <DeFigueiredo.Mark@epa.gov>
Cc: "Gunning, Paul" <Gunning.Paul@epa.gov>
Subject: FW: Massive underground CH4 leak in CA?

FYI

From: [Reidmiller, David R](#)
Sent: 11/20/2015 11:40 PM
To: [Talley, Trigg](#); [Artusio, Christo F](#); [Sierawski, Clare S](#); [Hochstrasser, Franz J.](#); [Florini, Karen L](#); [Cerqueira, Julie](#); [Schuler, Reed M](#); [Strait, Elan P](#); [Akhtar, Farhan H](#); [LeFranc, Maurice](#); [Irving, Bill](#); [Nakagawa, Melanie Y](#)
Subject: Massive underground CH4 leak in CA?

FYI - from a colleague out at NASA JPL in Pasadena:

When we both get some breathing room, remind me to share the unfolding story of the massive and (so far) uncontrollable methane leak underway from the biggest underground natural gas storage facility on the west coast. One month in and no end in sight. If it continues it could rival California's entire NG inventory. Kind of a mini Deepwater Horizon debacle. Watch for it in the news soon.

EPA WEEKLY ADMINISTRATOR'S REPORT
January 15, 2016 – January 24, 2016

Priorities

During the week of January 18, EPA Region 9 representatives are continuing to participate in regular operational calls with local, state and company officials to stay updated on the Aliso Canyon (California) Natural Gas Storage Facility Methane Leak. As of the week of January 11, SoCal Gas has placed 2516 citizens in temporary housing, 1081 requests are in process, 1035 newly assigned to temporary home providers, 1172 are unassigned or uncalled. 744 residents have declined relocation or checked out and returned home. In addition, the Los Angeles Unified School District's Board of Education is expediting the temporary relocation of Castlebay Lane Charter and Porter Ranch Community School. School resumed on January 11.

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the 1990s, the number of people in the United States who are 65 years of age or older is projected to increase from 20 million to 35 million, and the number of people 75 years of age or older is projected to increase from 10 million to 17 million (U.S. Census Bureau, 1996). The number of people 85 years of age or older is projected to increase from 2 million to 4 million (U.S. Census Bureau, 1996). The number of people 90 years of age or older is projected to increase from 500,000 to 1 million (U.S. Census Bureau, 1996).

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EPA WEEKLY ADMINISTRATOR'S REPORT
January 8, 2016 – January 17, 2016

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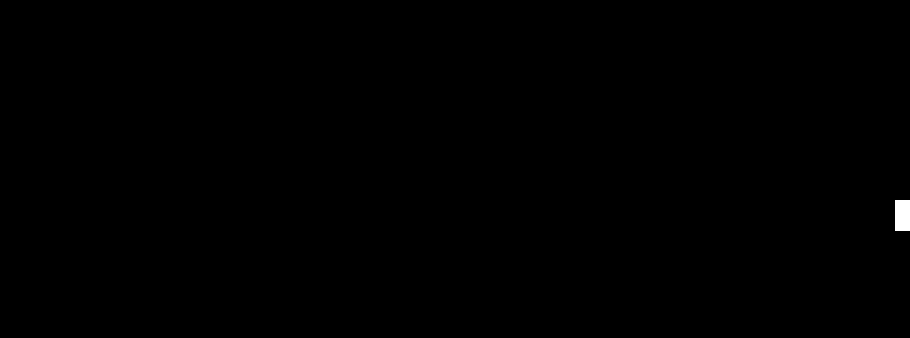
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The following table shows the results of the regression analysis for the dependent variable "Number of children in the household" (N = 1,000). The independent variables are "Age of the head of household" and "Gender of the head of household". The results show that the age of the head of household has a positive effect on the number of children in the household, while the gender of the head of household has no significant effect.

101

Age Group	Percentage
18-24	100%
25-34	95%
35-44	90%
45-54	85%
55-64	80%
65-74	75%
75-84	70%
85-94	65%
95+	60%

[illegible]

the 1990s, the number of people in the United States who are 65 years of age or older has increased by 50 percent, and the number of people 75 years of age or older has increased by 100 percent. The number of people 85 years of age or older has increased by 200 percent. The number of people 95 years of age or older has increased by 400 percent. The number of people 100 years of age or older has increased by 1,000 percent. The number of people 105 years of age or older has increased by 2,000 percent. The number of people 110 years of age or older has increased by 4,000 percent. The number of people 115 years of age or older has increased by 8,000 percent. The number of people 120 years of age or older has increased by 16,000 percent. The number of people 125 years of age or older has increased by 32,000 percent. The number of people 130 years of age or older has increased by 64,000 percent. The number of people 135 years of age or older has increased by 128,000 percent. The number of people 140 years of age or older has increased by 256,000 percent. The number of people 145 years of age or older has increased by 512,000 percent. The number of people 150 years of age or older has increased by 1,024,000 percent. The number of people 155 years of age or older has increased by 2,048,000 percent. The number of people 160 years of age or older has increased by 4,096,000 percent. The number of people 165 years of age or older has increased by 8,192,000 percent. The number of people 170 years of age or older has increased by 16,384,000 percent. The number of people 175 years of age or older has increased by 32,768,000 percent. The number of people 180 years of age or older has increased by 65,536,000 percent. The number of people 185 years of age or older has increased by 131,072,000 percent. The number of people 190 years of age or older has increased by 262,144,000 percent. The number of people 195 years of age or older has increased by 524,288,000 percent. The number of people 200 years of age or older has increased by 1,048,576,000 percent. The number of people 205 years of age or older has increased by 2,097,152,000 percent. The number of people 210 years of age or older has increased by 4,194,304,000 percent. The number of people 215 years of age or older has increased by 8,388,608,000 percent. The number of people 220 years of age or older has increased by 16,777,216,000 percent. The number of people 225 years of age or older has increased by 33,554,432,000 percent. The number of people 230 years of age or older has increased by 67,108,864,000 percent. The number of people 235 years of age or older has increased by 134,217,728,000 percent. The number of people 240 years of age or older has increased by 268,435,456,000 percent. The number of people 245 years of age or older has increased by 536,870,912,000 percent. The number of people 250 years of age or older has increased by 1,073,741,824,000 percent. The number of people 255 years of age or older has increased by 2,147,483,648,000 percent. The number of people 260 years of age or older has increased by 4,294,967,296,000 percent. The number of people 265 years of age or older has increased by 8,589,934,592,000 percent. The number of people 270 years of age or older has increased by 17,179,869,184,000 percent. The number of people 275 years of age or older has increased by 34,359,738,368,000 percent. The number of people 280 years of age or older has increased by 68,719,476,736,000 percent. The number of people 285 years of age or older has increased by 137,438,953,472,000 percent. The number of people 290 years of age or older has increased by 274,877,906,944,000 percent. The number of people 295 years of age or older has increased by 549,755,813,888,000 percent. The number of people 300 years of age or older has increased by 1,099,511,627,776,000 percent. The number of people 305 years of age or older has increased by 2,199,023,255,552,000 percent. The number of people 310 years of age or older has increased by 4,398,046,511,104,000 percent. The number of people 315 years of age or older has increased by 8,796,093,022,208,000 percent. The number of people 320 years of age or older has increased by 17,592,186,044,416,000 percent. The number of people 325 years of age or older has increased by 35,184,372,088,832,000 percent. The number of people 330 years of age or older has increased by 70,368,744,177,664,000 percent. The number of people 335 years of age or older has increased by 140,737,488,355,328,000 percent. The number of people 340 years of age or older has increased by 281,474,976,710,656,000 percent. The number of people 345 years of age or older has increased by 562,949,953,421,312,000 percent. The number of people 350 years of age or older has increased by 1,125,899,906,842,624,000 percent. The number of people 355 years of age or older has increased by 2,251,799,813,685,248,000 percent. The number of people 360 years of age or older has increased by 4,503,599,627,370,496,000 percent. The number of people 365 years of age or older has increased by 9,007,199,254,740,992,000 percent. The number of people 370 years of age or older has increased by 18,014,398,509,481,984,000 percent. The number of people 375 years of age or older has increased by 36,028,797,018,963,968,000 percent. The number of people 380 years of age or older has increased by 72,057,594,037,927,936,000 percent. The number of people 385 years of age or older has increased by 144,115,188,075,855,872,000 percent. The number of people 390 years of age or older has increased by 288,230,376,151,711,744,000 percent. The number of people 395 years of age or older has increased by 576,460,752,303,423,488,000 percent. The number of people 400 years of age or older has increased by 1,152,921,504,606,846,976,000 percent. The number of people 405 years of age or older has increased by 2,305,843,009,213,693,952,000 percent. The number of people 410 years of age or older has increased by 4,611,686,018,427,387,904,000 percent. The number of people 415 years of age or older has increased by 9,223,372,036,854,775,808,000 percent. The number of people 420 years of age or older has increased by 18,446,744,073,709,551,616,000 percent. The number of people 425 years of age or older has increased by 36,893,488,147,419,103,232,000 percent. The number of people 430 years of age or older has increased by 73,786,976,294,838,206,464,000 percent. The number of people 435 years of age or older has increased by 147,573,952,589,676,412,928,000 percent. The number of people 440 years of age or older has increased by 295,147,905,179,352,825,856,000 percent. The number of people 445 years of age or older has increased by 590,295,810,358,705,651,712,000 percent. The number of people 450 years of age or older has increased by 1,180,591,620,717,411,303,424,000 percent. The number of people 455 years of age or older has increased by 2,361,183,241,434,822,606,848,000 percent. The number of people 460 years of age or older has increased by 4,722,366,482,869,645,213,696,000 percent. The number of people 465 years of age or older has increased by 9,444,732,965,739,290,427,392,000 percent. The number of people 470 years of age or older has increased by 18,889,465,931,478,580,854,784,000 percent. The number of people 475 years of age or older has increased by 37,778,931,862,957,161,709,568,000 percent. The number of people 480 years of age or older has increased by 75,557,863,725,914,323,419,136,000 percent. The number of people 485 years of age or older has increased by 151,115,727,451,828,646,838,272,000 percent. The number of people 490 years of age or older has increased by 302,231,454,903,657,293,676,544,000 percent. The number of people 495 years of age or older has increased by 604,462,909,807,314,587,353,088,000 percent. The number of people 500 years of age or older has increased by 1,208,925,819,614,629,174,706,176,000 percent. The number of people 505 years of age or older has increased by 2,417,851,639,229,258,349,412,352,000 percent. The number of people 510 years of age or older has increased by 4,835,703,278,458,516,698,824,704,000 percent. The number of people 515 years of age or older has increased by 9,671,406,556,917,033,397,649,408,000 percent. The number of people 520 years of age or older has increased by 19,342,813,113,834,066,795,298,816,000 percent. The number of people 525 years of age or older has increased by 38,685,626,227,668,133,590,597,632,000 percent. The number of people 530 years of age or older has increased by 77,371,252,455,336,267,181,195,264,000 percent. The number of people 535 years of age or older has increased by 154,742,504,910,672,534,362,390,528,000 percent. The number of people 540 years of age or older has increased by 309,485,009,821,345,068,724,781,056,000 percent. The number of people 545 years of age or older has increased by 618,970,019,642,690,137,449,562,112,000 percent. The number of people 550 years of age or older has increased by 1,237,940,039,285,380,274,899,124,224,000 percent. The number of people 555 years of age or older has increased by 2,475,880,078,570,760,549,798,248,448,000 percent. The number of people 560 years of age or older has increased by 4,951,760,157,141,521,099,596,496,896,000 percent. The number of people 565 years of age or older has increased by 9,903,520,314,283,042,199,193,993,792,000 percent. The number of people 570 years of age or older has increased by 19,807,040,628,566,084,398,387,

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During the weeks of January 4 and January 11, Region 9 is continuing to participate in regular operations calls with local, state and other officials regarding the Aliso Canyon (California) Natural Gas Storage Facility methane leak. SoCalGas continues to drill 2 relief wells, withdraw gas to reduce overall storage reservoir pressure and leak flow rate, and review engineering solutions to capture gas from the surface. Region 9 developed a desk statement explaining EPA authorities and role in the issue.

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Proboszcz, Angie

From: Keener, Bill
Sent: Thursday, January 07, 2016 4:58 PM
To: Glenn, William;Zito, Kelly;Gaudario, Abigail;R9 Supervisors
Cc: Barkett, Bonnie;Maier, Brent;Calvino, Maria Soledad;Higuchi, Dean;Reyes, Deldi;PerezSullivan, Margot;Mogharabi, Nahal;Nazmi, Niloufar;Harris-Bishop, Rusty;Hudnall, Patricia;Ford, Margaret;Henderson, Alita;COHEN, Deborra;Pratt, Kristen;Meltzer, Kathy;Engelman, Alexa;Hood, Timonie;Blazej, Nova;Stollman, Scott;Amato, Paul;Schmidt, David;Skadowski, Suzanne;Rao, Kate;Ty, Fatima;Kao, Jessica;Huitric, Michele;Karlson, Kristine
Subject: End of Day -- January 7, 2016

Follow Up Flag: Follow up
Flag Status: Flagged

MEDIA

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New York Times: Graphics Editor Rebecca Kai is seeking data on leak rates and cumulative totals for the Southern California Gas leak at the Aliso Canyon facility. Sent her contact info for CARB and SCAQMD and link to the Cal OES website, which is clearinghouse for state information on the incident. CLOSED. (v) Contact: Kelly Zito

The Guardian: Reporter Suzanne Goldenberg is seeking information about the Southern California Gas leak at the Aliso Canyon facility, including background on any interplay between methane and ozone and data about ozone attainment areas across the state. Working with Air Div. and HQ on developing responses. Also sent her information on state agencies/contacts. AIR. OPEN. (v) Contact: Kelly Zito

Sierra Magazine: Fact checker Katherine Schuknecht verifying SCR use in Arizona, coordinated with Air division, referred her to plants in AZ as agency is technology neutral: CLOSED (v) Air

Los Angeles News Group: Reporter Stephanie Baer requested data reports on all lakes in California that were tested for cyanotoxins in 2015, as well as background information on the "2015 Cyanotoxins for California Lakes Waters" project. Reporter also requested a tour of the Region 9 lab, to find out more about how samples are tested. WATER. OPEN. (v) Contact: Michele Huitric

Reuters: Correspondent Sarah McBride had follow up questions and needed assistance with our TRI Explorer. Sent her HQ contact to help walk her through the database. CLOSED. ENF. (v.) Soledad Calvino.

KCSN News Radio: Reporter Diana Jimenez interviewed Karen Jurist and Rich Hiatt regarding the Cooper Drum settlement. CLOSED. (V) Superfund. Rusty Harris-Bishop

WEB

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Social Media:

Climate Change – Posted to our [Facebook](#) page a [video of Gina McCarthy at the Council on Foreign Relations](#), discussing the Paris Climate Change conference.

Web Updates:

Aliso Canyon – Posted a page in our Media Center with a brief statement on the [SoCalGas natural gas leak at Aliso Canyon](#) and links to CA OES’s website and EPA correspondence on the matter.

CONGRESSIONAL & INTERGOVERNMENTAL

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Congressman Steve Knight (R-CA-25). Staffer Brandon Eden asked for a call so that EPA Region R9 can explain to the Congressman EPA’s limited role with respect to the SoCal Gas natural gas leak at Aliso Canyon. Will set up call, likely for this Friday, and Jared and Sylvia may take the call. Bill Keener

Proboszcz, Angie

From: Keener, Bill
Sent: Wednesday, December 30, 2015 4:26 PM
To: Glenn, William;Zito, Kelly;Gaudario, Abigail;R9 Supervisors
Cc: Barkett, Bonnie;Maier, Brent;Calvino, Maria Soledad;Higuchi, Dean;Reyes, Deldi;PerezSullivan, Margot;Mogharabi, Nahal;Nazmi, Niloufar;Harris-Bishop, Rusty;Hudnall, Patricia;Ford, Margaret;Henderson, Alita;COHEN, Deborra;Pratt, Kristen;Meltzer, Kathy;Engelman, Alexa;Hood, Timonie;Blazej, Nova;Stollman, Scott;Amato, Paul;Schmidt, David;Skadowski, Suzanne;Rao, Kate;Ty, Fatima;Kao, Jessica;Huitric, Michele
Subject: End of Day -- December 30, 2015
Follow Up Flag: Follow up
Flag Status: Flagged

MEDIA

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Al Jazeera (Los Angeles): Reporter David Douglas was looking for information on EPA involvement in the Aliso Canyon natural gas leak. Send him Dec. 18 information request letter and EPA response to Congressman Brad Sherman. SFUND. Closed. Contact: Kelly Zito

Natural Gas Intelligence/Shale Daily: West Coast correspondent Richard Nemec was looking for information on EPA involvement in the Aliso Canyon natural gas leak. Sent him Dec. 18 information request letter signed by Sfund director Enrique Manzanilla. SFUND. Closed. Contact: Kelly Zito

Upvoted.com: Gabrielle Canon, writer for Upvoted.com (Reddit), was seeking information on Aliso Canyon natural gas leak. Provided information request letter and letter to Congressman Brad Sherman. SFUND. Closed. Contact: Kelly Zito

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Social Media:

Safer Choice Labels – As part of the 2015 Year in Review, posted to our [Facebook](#) and [Twitter](#) pages about our EPA Safer Choice label and linked to [Gina's video](#) launching the new label.

CONGRESSIONAL & INTERGOVERNMENTAL

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Rep. Brad Sherman (D-CA-30): Regional Counsel Sylvia Quast and Brent Maier had a follow up call with Congressman Brad Sherman's Chief of Staff, Don MacDonald; Lauren Wolman, Legislative Director; Lauren Attard, Legislative Counsel; and John Alford, Senior Policy Advisor in the Sherman Oaks District Office to update them on EPA's role and our sending of an information request to Southern California Gas following receipt of our recent response to the Congressman's incoming letter regarding Aliso Canyon natural gas leak. We agreed to let the call participants know that Southern California Gas has provided the requested documents for our information request under CAA Section 114. Sylvia will let Brent know that we have received the requested information and will provide them with an update.

Sen. Dianne Feinstein (D-CA): Regional Counsel Sylvia Quast and Brent Maier along with Bill Keener and Kelly Zito had a call with Ken Rooney, Legislative Assistant in the Senator's DC office; Cameron Onumah, Senior Field Representative; Kevin Chang, Field Representative; and Ryan Williams, Staff Assistant in the Senator's Los Angeles Office about the Aliso Canyon natural gas leak who contacted us regarding EPA's role and involvement with any ongoing investigation. As follow-up, Ken Rooney requested that we schedule a call for some time the week of January 11th to circle back with our office once we have had a chance to review the information provided by SoCal Gas in response to our CAA Sec. 114 request. Brent will follow up on the scheduling of a subsequent call to update them on our review of the information provided. We also agreed during the call to provide them with a point of contact that they can talk with regarding operations and Sylvia Quast provided the participants with the name of the Incident Commander, Jimmie Cho, who is organizing the daily calls is Jimmie Cho, along with his contact information.

Rep. Doug LaMalfa (R-CA-1): A new incoming letter from Congressman Doug LaMalfa (#AL-16-000-2871) sent to EPA Administrator Gina McCarthy and DOI Secretary Sally Jewell regarding Iron Mountain Mine Superfund Site was controlled to Region IX for development of a response for signature by Regional Administrator. This letter will be controlled to Lily Tavassoli in Superfund for development of a draft response. Because this incoming letter was directed to both DOI and EPA, I will follow up with OCIR as to the process for coordination in development of a response and discuss with Lily any guidance from OCIR. The due date for a final signed response is January 13, 2016. A copy of the incoming letter is available at the following link:

<https://lamalfa.house.gov/sites/lamalfa.house.gov/files/documents/LettertoSecretaryJewell.pdf>

Sen. Harry Reid (D-NV): A letter to RA from Senator Harry Reid dated December 27, 2015 supporting the proposed listing of Anaconda was obtained via the Senator's website. Awaiting arrival of hardcopy to Front Office. Brent Maier has entered this letter into our Congressional Correspondence Management System (CMS) and control this letter and prepare a yellow folder for delivery to Angeles Herrera in Superfund. A copy of the incoming letter is available at the following link: <http://www.reid.senate.gov/wp-content/uploads/2015/12/Letter-to-Regional-Administrator-Jared-Blumenfeld.pdf>

Congressional Outreach on Proposed Approval of the SJV 2013 Ozone Plan for the 1-Hour Ozone Standard: Brent Maier notified Senators Barbara Boxer and Dianne Feinstein and Representatives Costa, Denham, McCarthy, McClintock, McNerney, Nunes, and Valadao about Deputy Regional Administrator Alexis Strauss signing a Federal Register notice on December 24th proposing to approve the bulk of the SJV 2013 Ozone Plan for the 1-hour ozone standard, as well as demonstrations relating to vehicle miles traveled for 1997 8-hr ozone standard.

Proboszcz, Angie

From: Glenn, William
Sent: Wednesday, January 13, 2016 5:08 PM
To: Keener, Bill;Zito, Kelly;Gaudario, Abigail;R9 Supervisors
Cc: Barkett, Bonnie;Maier, Brent;Calvino, Maria Soledad;Higuchi, Dean;Reyes, Deldi;PerezSullivan, Margot;Mogharabi, Nahal;Nazmi, Niloufar;Harris-Bishop, Rusty;Hudnall, Patricia;Ford, Margaret;Henderson, Alita;COHEN, Deborra;Pratt, Kristen;Meltzer, Kathy;Engelman, Alexa;Hood, Timonie;Blazej, Nova;Stollman, Scott;Amato, Paul;Schmidt, David;Skadowski, Suzanne;Rao, Kate;Ty, Fatima;Kao, Jessica;Huitric, Michele;Karlson, Kristine
Subject: End of Day -- January 13, 2016

Follow Up Flag: Follow up
Flag Status: Flagged

MEDIA

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LA Daily News: Ran Op-Ed on Trash Policy from Jared in today's paper and online.

Cleaning up the Pacific Garbage Patch: <http://www.dailynews.com/opinion/20160113/how-californias-new-trash-control-policy-can-help-shrink-the-pacific-garbage-patch>. WATER. CLOSED. (v). Nahal Mogharabi.

The following press release was issued today: [U.S. EPA Approves California's New Trash Control Policy](#). WATER. CLOSED. Nahal Mogharabi.

WEB

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Social Media:

Children's Health – At the request of headquarters, shared a post to our [Facebook](#) page about our commitment to children's health and linked to our editorial in the National Institute of Health's Environmental Health Perspectives newsletter, [Renewing the Federal Commitment to Advance Children's Health](#).

Web Updates:

California Air Actions – Posted a link to the Federal Register notice for the South Coast Reclassification as Serious Nonattainment for 2006 PM2.5 to the [News and Events page](#).

Online Updates:

Transit Subsidy FAQs – Posted an updated version of the [Transit Subsidy FAQ](#).

Building Project – Added the latest progress report / photos to the [Construction page](#) in the Building Project site.

CONGRESSIONAL & INTERGOVERNMENTAL

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Sen. Barbara Boxer and Sen. Dianne Feinstein: A letter sent to DOT Secretary Anthony Fox, EPA Administrator Gina McCarthy, and DOJ Attorney General Loretta Lynch regarding the Aliso Canyon Natural Gas Storage Facility uncontrolled leak was shared with RA Blumenfeld by Senate Environment and Public Works Committee staffer Jason Albritton. The letter requests that EPA, DOT, and provide the Senators with the following information: 1) An update on actions taken

by each of your agencies to date, including any direction or advice you are providing to State agencies and Southern California Gas Company on the response; 2) A description of how state agencies have exercised any delegated Federal authorities in relation to this natural gas leak and a description of your oversight of the use of these Federal authorities; 3) A legal analysis of any Federal authorities that could apply to this incident and storage fields in general and how your agencies have exercised these authorities to date; and 4) A technical analysis of whether Southern California Gas Company could more quickly reduce the gas stored in the facility to mitigate the uncontrolled leak of natural gas. A copy of the letter is available upon request. This letter has been controlled to Region IX, however, OCIR is working directly with the Senators offices' and whether a written response is needed is still under discussion.

OCIR Request for One-Pager on Aliso Canyon: Brent Maier shared a one-pager per OCIR's request on Aliso Canyon prepared by our Office of Regional Counsel and Superfund Division for the Administrator's briefing book for an upcoming hearing before the House Agricultural Committee.

Rep. Mark Amodei (R-NV-3): Brent Maier reached out to Jason Riederer earlier today who is the Legislative Director for Congressman Mark Amodei regarding their interest in setting up a briefing with the Congressman on Anaconda Copper Mine Site. Jason responded and shared with us a list of 11 specific questions that he would like answered before a briefing is scheduled. They would like to schedule a call or in-person briefing before January 27th if possible. Brent will be working with the Congressman's scheduler, Rachel Provost, to schedule a day/time that will work.

Rep. Steve Knight (R-CA-25): The Congressman wrote an opinion column in today's LA Daily News regarding his efforts to address the Aliso Canyon/Porter Ranch natural gas leak. Congressman Steve Knight, R-Santa Clarita, represents California's 25th District, including Porter Ranch. Link to opinion column:

<http://www.dailynews.com/opinion/20160112/porter-ranch-needs-leadership-not-politics-steve-knight>

WOTUS: The House voted today to overturn the WOTUS rule from the Environmental Protection Agency that asserts federal authority over small waterways. The House passed the resolution 253-166 Wednesday, with 12 Democrats supporting it. Rep. Chris Smith (N.J.) was the only Republican to vote against the measure. The measure is now headed to President Obama's desk; he has promised to veto it. The Clean Water Rule is not currently being enforced because of a federal court ruling that blocked its implementation while it is being litigated.

Congressional Outreach on EPA Approval of New California Trash Control Policy: Brent Maier shared today's press release with Congressional staff for the entire California Congressional delegation regarding EPA recently approving the State Water Resources Control Board's new water quality standards for trash in California's waters. The standards are part of the state's new Trash Control Policy, designed to keep trash out of streams, lakes, bays, estuaries, coastal and ocean waters in California to protect people and the environment.

Sen. Martin Heinrich (D-NM): A final draft response to the incoming letter from Sen. Martin Heinrich regarding uranium cleanup operations at Northeast Churchrock Mine, Quivira/Kerr-McGee Mine, and the UNC Church Rock Mill is being finalized for concurrence chain for RA signature. Brent Maier extended the due date of this letter until Thursday, January 15, 2016 to provide time for final review and signature.

Rep. Brad Sherman (D-CA-30): A final draft EPA response to the incoming letter from Congressman Sherman on Aliso Canyon has been drafted by ORC and shared with PHMSA. This will be a joint response with PHMSA and FERC once a draft is ready to send to OCIR's Carolyn Levine for their assistance and coordination of working with PHMSA and FERC to finalize a draft that will be signed by EPA Administrator Gina McCarthy along with PHMSA, and FERC.

Rep. David Valadao (R-CA-21): Rep. David Valadao yesterday introduced legislation to approve a contentious deal between the federal government and the powerhouse Westlands Water District resolving a long-running dispute over drainage water and forgiving the district's \$350 million debt to federal taxpayers. Under the [agreement](#), which was filed in September in U.S. District Court for the Eastern District of California, Westlands will assume responsibility for its drainage issues and drop its suit against Interior in exchange for forgiveness of its outstanding debt from the construction of the CVP itself -- a value of about \$350 million. The measure, despised by environmentalists and northern

Californians, only stands to complicate efforts to move a drought bill for the Golden State. - [H.R. 4366: To affirm an agreement between the United States and Westlands Water District dated September 15, 2015, and for other purposes.](#) This bill was referred to the House Committee on Natural Resources which will consider it before sending it to the House floor for consideration.

Region IX Hot Issues for Upcoming U.S. Conference of Mayors Winter Meeting: Brent Maier compiled and sent forward to OCIR's Arnita Hannon some Region IX Hot Issues for a select group of Region IX Mayors that are members of the Environment Committee and who will be meeting in conjunction with the U.S. Conference of Mayors Winter Meeting on January 20 – 22, 2016. The Hot Issues were for the following Mayors and included: Mayor Carolyn Goodman, Las Vegas, NV - Making a Visible Difference in Communities (MVD); Mayor Ashley Swearengin, Fresno, CA - Strong Cities, Strong Communities (SC2-Fresno).

Legislative Action:

January 11, 2016 - [H.R. 653: FOIA Act](#) - This bill's text for status *Passed the House (Engrossed)* (Jan 11, 2016) is now available.

January 11, 2016 - [H.R. 1155: SCRUB Act of 2016](#) - Searching for and Cutting Regulations that are Unnecessarily Burdensome Act of 2016 (SCRUB). This bill's text for status *Referred to Senate Committee* (January 11, 2016) is now available.

January 11, 2016 - [H.R. 3231: Federal Intern Protection Act of 2015](#) - This bill's text for status *Passed the House (Engrossed)* (January 11, 2016) is now available.

January 11, 2016 - [H.R. 4359: Administrative Leave Reform Act](#) - This bill's text is now available.

January 11, 2016 - [H.R. 4360: Official Personnel File Enhancement Act](#) - This bill's text is now available.

January 12, 2016 - [H.R. 1644: STREAM Act](#) - Supporting Transparent Regulatory and Environmental Actions in Mining Act (STREAM). This bill's text for status *Passed the House (Engrossed)* (January 12, 2016) is now available.

January 12, 2016 - [H.R. 4358: Senior Executive Service Accountability Act](#) - Last Action: Ordered to be reported by Voice Vote. The committees assigned to this bill sent it to the House or Senate as a whole for consideration on January 12, 2016.

Proboszcz, Angie

From: Adm13McCarthy, Gina
Sent: Friday, January 15, 2016 3:58 PM
To: Blumenfeld, Jared
Subject: Re: R9 Weekend Note

Follow Up Flag: Follow up
Flag Status: Flagged

I am well. Hope you're doing ok.

Sent from my iPhone

On Jan 15, 2016, at 6:42 PM, Blumenfeld, Jared <BLUMENFELD.JARED@EPA.GOV> wrote:

Thanks. Hope you are well.

Sent from my iPhone

On Jan 15, 2016, at 3:40 PM, Adm13McCarthy, Gina <Adm13McCarthy.Gina@epa.gov> wrote:

Jared congrats on the work to get funds out to communities in need in CA and HI.
Bravo!

Sent from my iPhone

On Jan 15, 2016, at 5:55 PM, Blumenfeld, Jared <BLUMENFELD.JARED@EPA.GOV> wrote:

Aliso Canyon Natural Gas Leak, Porter Ranch, CA: We continue to participate in daily calls with SoCal Gas, state and local agencies. RRT9 requested assistance from the NRT in the form of technical expertise from other agencies, such as the Department of Energy's National Laboratories, in the areas of gas capture and well-kills. Gov. Brown's office convened a meeting on January 15 at Porter Ranch at which senior state agency representatives spoke – we sent representative but will not be on panel. Nichole is working with EPW to schedule a briefing.

- On 13 January, the Region participated in an 'agency only' call during which the gas capture system was discussed. In answer to the question EPA has been posing – that is, which state or county entities are responsible for reviewing the gas capture plan for safety considerations, several participants suggested that the Los Angeles County Public Works Department and/or the County Fire Marshall may need to review the gas capture system design documents, to evaluate the design for electrical, mechanical and structural integrity, from a county building code standpoint. LA County Fire was going to follow up on this.

- Drilling has reached approximately 7800 feet. Ranging run #14 is being performed today. Relief well # 1 is on schedule for completion at the end of February or early March. Drilling has now slowed significantly because the ranging runs will have to be performed at a greater frequency to accurately establish the position of RW #1 in relation to SS-25. Drilling is occurring around the clock.
- Region 9 will have a formal review role for any Title V permit that is issued for the proposed gas capture system at the Well 25-SS location. This poses unique siting, design and potential safety issues.
- Relocations – SoCal Gas has received 4796 inquiries for relocation out of the affected area in Porter Ranch. SoCal Gas has placed occupants of 2485 residences into temporary housing, 1732 requests are in process with an additional 529 “pending resolution”.

CA Water Quality Standards for Trash: On January 12, we approved the California State Water Resources Control Board’s water quality standards for trash in state waters. These standards will prohibit the discharge of trash from municipal stormdrain systems, industrial and transportation facilities, and construction sites that are regulated under NPDES permits. California is the first state to adopt a trash control policy and water quality standards for trash. Here’s the op-ed I wrote on this: <http://www.dailynews.com/opinion/20160113/how-californias-new-trash-control-policy-can-help-shrink-the-pacific-garbage-patch>

HDOH DWSRF: Hawaii Department of Health responded to our September 21, 2015, grant enforcement letter, in which EPA withheld the majority of HDOH's 2015 SRF capitalization grant funds. In order to receive the remainder of HDOH’s 2015 allotment, we had required that HDOH commit at least \$28,283,883 in new assistance agreements and disburse \$7,674,832 between June 30, 2015-January 29, 2016. HDOH informed us that they had met the interim required targets, which we confirmed were met. We are prepared to award the remaining balance of HDOH’s 2015 Drinking Water allotment of \$8,098,680 pending receipt and approval of an amended grant application for these funds. Really good news that the communities will get the support they need!

BTW - CA DWSRF: The California State Water Resources Control Board informed us that they have reduced DWSRF unliquidated obligations to below \$160 million, which is the target they were required to meet by June 2016, the end of their corrective action plan. The program had a ULO of \$455 million in October 2012.

Climate Justice Alliance (CJA) Rally: Communities for a Better Environment, on behalf of CJA, requested a meeting with the Regional Administrator and Elizabeth Adams on January 19 on the Clean Power Plan. The group will hold a peaceful rally in front of the building. CJA

member groups intend to hold similar rallies at all ten EPA regional offices on the same day.

Office of Civil Rights Public Meeting, Oakland: The Office of Civil Rights is organizing a series of public meetings to take comment on proposed changes to EPA's civil rights regulations. Region 9's meeting will take place on January 20 at the Oakland Downtown Marriott. Alexis Strauss and senior representatives of OCR and DOJ will give remarks.

EPA Border Children's Environmental Health Symposium, San Diego, CA: I will give opening remarks at the Children's Environmental Health Symposium, which will focus on children's environmental health risks found within the California/Baja California and Arizona/Sonora regions. This symposium will discuss environmental health issues in the border region, how prenatal and childhood exposures can impact children's health and development, and what participants can do in their respective roles to address or mitigate children's environmental health risks

Jared Blumenfeld
U.S. EPA
Regional Administrator
Pacific Southwest
415-947-8702

Proboszcz, Angie

From: Adm13McCarthy, Gina
Sent: Friday, January 15, 2016 3:41 PM
To: Blumenfeld, Jared
Subject: Re: R9 Weekend Note

Follow Up Flag: Follow up
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Jared Blumenfeld
U.S. EPA
Regional Administrator
Pacific Southwest
415-947-8702

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

Sent from my iPad

On Jan 8, 2016, at 5:58 PM, Blumenfeld, Jared <BLUMENFELD.JARED@EPA.GOV> wrote:

Aliso Canyon Natural Gas Leak: Gov. Brown declared a state of emergency in Porter Ranch, the residential community closest to the Aliso Canyon facility. Cong. Sherman sent a second letter Jan. 5 to EPA, PHMSA, FERC, SoCalGas, CADiv. of Oil and Gas (DOGGR), So. Coast AQMD and the CA PUC, requesting the parties work together to stop the leak sooner. We participate in daily calls with SoCalGas, state and local agencies, led an incident-specific Regional response Team call Jan. 7, and plan for a similar National Response Team call Jan. 11. On Thursday, SoCalGas agreed to the terms of a So. Coast AQMD order which will be adopted at their board hearing Saturday morning, near the site. The order calls for increased capture and incineration of natural gas (via carbon adsorbers and thermal oxidizers), funding a health study on the potential impacts to the community, stepped-up air

monitoring, and continuous monitoring of the leak with an infrared camera. The company will improve its leak detection, reporting and inspection practices, will withdraw the maximum amount of gas from the storage facility as quickly as possible, and provide records to So. Coast AQMD, including the 1,600 odor complaints it has received, the amount of gas it has injected and withdrawn from the facility. I had a call this morning with Senator Boxer and briefed Nichole on the outcomes.

Argonaut Mine, Jackson, CA: The US Army Corps of Engineers completed a structural assessment of the Argonaut tailings dam last week, given winter weather. Diagonal cracks were encountered in the arch buttresses.

Hawaii SRF: Hawaii DOH informed us they have met our interim targets in their Drinking Water SRF corrective action plan ahead of the Jan. 28 deadline. We withheld most of their FY15 capitalization grant; once we confirm DOH has met the targets, we will award the remaining FY15 grant funds.

Carbon Sequestration/Healthy Soils: next Wednesday, January 13, I'll tour the TomKat Ranch in Pescadero, CA to learn about its focus on sustainable land use, carbon sequestration, water management, and soil health.

Army Corps Meeting: next Friday, January 15, I'll meet in Los Angeles with the Army Corps of Engineers' Los Angeles District Commander, Col. Kirk Gibbs, to discuss Rosemont Mine.

Anaconda Mine, NV: We'll brief Congressman Amodei on the Anaconda Yerington Copper Mine Site and our recent letter to Gov. Sandoval regarding our NPL listing proposal. We plan to brief Congressman Hardy's office on January 12 (the site is in his district).

Hawaii: the week of January 19, I will be in Hawaii to meet with the new NAVFAC Pacific Commander re Red Hill and Hawaii DOH's Deputy Director, then visit Midway Atoll to see firsthand the PCB contamination and marine debris.

Jared Blumenfeld
U.S. EPA
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[illegible]

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Jared Blumenfeld
U.S. EPA
Regional Administrator
Pacific Southwest
415-947-8702

Proboszcz, Angie

From: Blumenfeld, Jared
Sent: Friday, January 22, 2016 2:44 PM
To: Ty, Fatima
Subject: Re: Top Entries - Weekly Report January 25, 2016

Follow Up Flag: Follow up
Flag Status: Flagged

Thanks.

Sent from my iPhone

On Jan 22, 2016, at 12:27 PM, Ty, Fatima <Ty.Fatima@epa.gov> wrote:

LAST WEEK: JANUARY 18–JANUARY 22, 2016

Hawaii Trip: The Regional Administrator was in Hawaii for various meetings and a visit to Midway Atoll. He participated in a radio interview, attended Red Mass, observed a CWSRF-funded project that will reduce discharges to the Ala Wai, and met with HDOH's Deputy Director for Environmental Health, Keith Kawaoka. The Regional Administrator also visited Midway Atoll to see firsthand the PCB contamination and marine debris that has been impacting the islands.

Centennial Corridor: On January 11, EPA commented on Caltrans' Final Environmental Impact Statement (EIS) for the Centennial Corridor highway project in Bakersfield. Caltrans adequately responded to EPA comments on the Draft EIS, and committed to numerous localized air quality project improvements through the \$1.5 million Voluntary Emissions Reduction Agreement they reached with the San Joaquin Valley Air Pollution Control District. Some of the project improvements include upgrading school HVAC systems, diesel engine retrofits for school buses, automotive tune-ups for residents, and wood-burning fireplace replacements, with a prioritization for communities with environmental justice concerns.

Smart Growth in Calexico: At the invitation of GSA, on January 19, we participated in the first of a series of visioning workshops in Calexico. GSA is investing more than \$300 million to modernize a port of entry over the next 5 years and wants to leverage that investment to benefit Calexico. GSA is conducting a series of workshops to inform an "urban planning feasibility study." The City is looking to improve the pedestrian experience and streetscape and revitalize its downtown, as well as improve transit connectivity to the port of entry. Calexico is in Imperial Valley, one of our Making a Visible Difference communities.

Aliso Canyon Natural Gas Leak: We continue to participate in daily calls with SoCalGas, state and local agencies. We continue to work on a plan to review the 1,665-page SoCalGas response to our CAA information request. On January 18, SoCalGas sent Governor Brown a letter indicating that, due to safety concerns expressed by its own safety team as well as (unspecified) state regulators, it has "determined that a methane capture and processing system cannot be installed at the SS25 well site without adding unnecessary safety risks" and has decided to cease

pursuing the plan to capture and flare the methane from the leaking well. On January 20, we participated in a call with DOT/PHMSA and DOE staff to share information and coordinate activities. SoCalGas continues to make good progress with drilling a relief well to attempt a bottom-kill operation in February.

Climate Justice Alliance Rally: On January 19, about 15 Climate Justice Alliance representatives gathered for a peaceful rally in front of the Region 9 office. They wanted to hand deliver their report, “The Our Power Plan: Charting a Path to Climate Justice.” Elizabeth Adams and Amy Zimpfer met with the group and advised them to formally submit comments by January 21.

Potable Water Reuse in California: On January 19, we participated in a meeting of the California State Water Board’s Advisory Group on Direct Potable Water Reuse, which is preparing recommendations on elements for upcoming regulations. We provided comments on ensuring appropriate operator training and certification and for additions to the Consumer Confidence Reports to cover reuse treatment, monitoring, compliance and health considerations.

THIS WEEK: JANUARY 25-JANUARY 29, 2016

EPA Border Children's Environmental Health Symposium, San Diego, CA: On January 27, the Regional Administrator will give opening remarks at the Children’s Environmental Health Symposium, which will focus on children’s environmental health risks found within the California/Baja California and Arizona/Sonora regions. This symposium will discuss environmental health issues in the border region, how prenatal and childhood exposures can impact children’s health and development, and what participants can do in their respective roles to address or mitigate children’s environmental health risks.

CA SRF Event, Carlsbad: On January 27, the Regional Administrator will participate in a press event highlighting the SRF in California. The event will feature the Carlsbad Municipal Water District, which has received \$29.5 million for a water recycling project.

Imperial County Meeting with Janet McCabe: On January 25, the Imperial County Air Pollution Control District’s Air Pollution Control Officer, Brad Poiriez, will meet with Acting AA Janet McCabe in Washington D.C. Topics of discussion will include dust at the Salton Sea, PM_{2.5} and ozone plans, exceptional events, and US/Mexico border issues. Mr. Poiriez will also meet with Office of Environmental Justice Director, Matt Tejada.

Water Innovation at CleanTech Forum, San Francisco: At the request of ORD’s National Risk Management Research Laboratory, we will participate in the CleanTech Forum, January 25-27. This event fosters sustainability technology innovation, including energy and water sectors, through discussions and networking to match start-up companies with investors. We will support ORD’s Water Technology Clusters program, which is looking for emerging trends and technologies.

Virgin America Compliance Assistance: We will meet with Virgin America in Burlingame, January 26-28, to conduct our first Airline Drinking Water Rule compliance assistance, consistent with EPA HQ’s policy. We will observe O&M disinfection, flushing, filling, and sampling of aircraft potable water systems at SFO airport. EPA Richmond lab will analyze samples for bacteria.

Super Bowl 50: The Super Bowl is coming to the Bay Area. San Francisco will host 9 days of activities before the big game on February 7 in Santa Clara. Two major Super Bowl events will be staged near the Ferry Building and Moscone Center that will affect traffic and transit routes. Road closures on January 23-February 12 will include Howard Street from 3rd to 5th Street, southbound lanes of the Embarcadero, and streets surrounding the Embarcadero/Market Street area. In anticipation of these changes, we are asking everyone to plan ahead and work closely with your supervisor to discuss work options.

Lean Training: We will host training for Lean Six Sigma green belt and black belt candidates on January 25-29. There are 13 green belt candidates and 8 black belt candidates from Region 9 and 8 candidates from other regional and Headquarters offices.

NEXT WEEK: FEBRUARY 1-FEBRUARY 5, 2016

California Air Resources Board and San Joaquin Valley Meeting: On February 3, we will host a meeting with executive management from CARB and the SJV Air District to discuss policies and measures needed to help the SJV attain the PM_{2.5} and ozone standards and maintain attainment of the PM₁₀ standard. This year the state must submit attainment plans for the 2008 ozone standard (July) and the 2012 PM_{2.5} standard (October) and a second 10-year maintenance plan for the PM₁₀ standard (December) for the SJV.

Hawaii Sulfur Dioxide Exceptional Events: By February 2, we will request the Regional Administrator's signature on our concurrence with Hawaii's SO₂ Exceptional Events request for four monitors affected by volcanic emissions in 2012, 2013, and 2014. This concurrence will bring the monitors on the Big Island of Hawaii into attainment of the 2010 SO₂ standard.

Hawaii SO₂ Designation: By February 5, we will request the Regional Administrator's signature on a 120-day letter to the Governor of Hawaii concerning Hawaii's SO₂ designation. The Big Island is the only affected area in Region 9 for this round of SO₂ designations. Once we concur with Hawaii's Exceptional Events request we can designate the island unclassifiable/attainment by the consent decree deadline of July 2, 2016.

Emergency Preparedness Meeting: On February 2-4, Region 9 will host federal and state representatives from Regions 8, 9 and 10 at the Great American West's first '3-region' Emergency Preparedness conference in San Diego. In partnership with the Office of Emergency Management, we are bringing together State Emergency Response Commission (SERC) representatives with federal agencies (Pipeline Hazardous Materials Safety Administration, Federal OSHA, Department of Homeland Security) and state agencies (California Office of Spill Prevention and Response, California Environmental Protection Agency) for discussions centered on the implementation of Executive Order 13650 - Improving Chemical Facility Safety and Security.

California Furnace Rules: In February, we plan to request the Regional Administrator's signature on a Federal Register notice finalizing approval of San Joaquin and South Coast rules that limit emissions from residential furnaces. These rules lower the nitrogen oxides emission limits on furnaces that can be sold in San Joaquin and South Coast.

Proboszcz, Angie

From: Blumenfeld, Jared
Sent: Friday, January 15, 2016 3:42 PM
To: Adm13McCarthy, Gina
Subject: Re: R9 Weekend Note

Follow Up Flag: Follow up
Flag Status: Flagged

Thanks. Hope you are well.

Sent from my iPhone

On Jan 15, 2016, at 3:40 PM, Adm13McCarthy, Gina <Adm13McCarthy.Gina@epa.gov> wrote:

Jared congrats on the work to get funds out to communities in need in CA and HI. Bravo!

Sent from my iPhone

On Jan 15, 2016, at 5:55 PM, Blumenfeld, Jared <BLUMENFELD.JARED@EPA.GOV> wrote:

Aliso Canyon Natural Gas Leak, Porter Ranch, CA: We continue to participate in daily calls with SoCal Gas, state and local agencies. RRT9 requested assistance from the NRT in the form of technical expertise from other agencies, such as the Department of Energy's National Laboratories, in the areas of gas capture and well-kills. Gov. Brown's office convened a meeting on January 15 at Porter Ranch at which senior state agency representatives spoke – we sent representative but will not be on panel. Nichole is working with EPW to schedule a briefing.

- On 13 January, the Region participated in an 'agency only' call during which the gas capture system was discussed. In answer to the question EPA has been posing – that is, which state or county entities are responsible for reviewing the gas capture plan for safety considerations, several participants suggested that the Los Angeles County Public Works Department and/or the County Fire Marshall may need to review the gas capture system design documents, to evaluate the design for electrical, mechanical and structural integrity, from a county building code standpoint. LA County Fire was going to follow up on this.
- Drilling has reached approximately 7800 feet. Ranging run #14 is being performed today. Relief well # 1 is on schedule for completion at the end of February or early March. Drilling has now slowed significantly because the ranging runs will have to be performed at a greater frequency to accurately establish the position of RW #1 in relation to SS-25. Drilling is occurring around the clock.
- Region 9 will have a formal review role for any Title V permit that is issued for the proposed gas capture system at the Well 25-SS location. This poses unique siting, design and potential safety issues.

- Relocations – SoCal Gas has received 4796 inquiries for relocation out of the affected area in Porter Ranch. SoCal Gas has placed occupants of 2485 residences into temporary housing, 1732 requests are in process with an additional 529 “pending resolution”.

CA Water Quality Standards for Trash: On January 12, we approved the California State Water Resources Control Board’s water quality standards for trash in state waters. These standards will prohibit the discharge of trash from municipal stormdrain systems, industrial and transportation facilities, and construction sites that are regulated under NPDES permits. California is the first state to adopt a trash control policy and water quality standards for trash. Here’s the op-ed I wrote on this:
<http://www.dailynews.com/opinion/20160113/how-californias-new-trash-control-policy-can-help-shrink-the-pacific-garbage-patch>

HDOH DWSRF: Hawaii Department of Health responded to our September 21, 2015, grant enforcement letter, in which EPA withheld the majority of HDOH's 2015 SRF capitalization grant funds. In order to receive the remainder of HDOH’s 2015 allotment, we had required that HDOH commit at least \$28,283,883 in new assistance agreements and disburse \$7,674,832 between June 30, 2015-January 29, 2016. HDOH informed us that they had met the interim required targets, which we confirmed were met. We are prepared to award the remaining balance of HDOH’s 2015 Drinking Water allotment of \$8,098,680 pending receipt and approval of an amended grant application for these funds. Really good news that the communities will get the support they need!

BTW - CA DWSRF: The California State Water Resources Control Board informed us that they have reduced DWSRF unliquidated obligations to below \$160 million, which is the target they were required to meet by June 2016, the end of their corrective action plan. The program had a ULO of \$455 million in October 2012.

Climate Justice Alliance (CJA) Rally: Communities for a Better Environment, on behalf of CJA, requested a meeting with the Regional Administrator and Elizabeth Adams on January 19 on the Clean Power Plan. The group will hold a peaceful rally in front of the building. CJA member groups intend to hold similar rallies at all ten EPA regional offices on the same day.

Office of Civil Rights Public Meeting, Oakland: The Office of Civil Rights is organizing a series of public meetings to take comment on proposed changes to EPA’s civil rights regulations. Region 9’s meeting will take place on January 20 at the Oakland Downtown Marriott. Alexis Strauss and senior representatives of OCR and DOJ will give remarks.

EPA Border Children's Environmental Health Symposium, San Diego, CA: I will give opening remarks at the Children’s Environmental Health Symposium, which will focus on children’s environmental health risks found within the California/Baja California and Arizona/Sonora regions. This symposium will discuss environmental health issues in the border region, how prenatal and childhood exposures can impact children’s health and development, and what participants can do in their respective roles to address or mitigate children’s environmental health risks

Jared Blumenfeld
 U.S. EPA

Regional Administrator
Pacific Southwest
415-947-8702

Proboszcz, Angie

From: Blumenfeld, Jared
Sent: Friday, January 15, 2016 2:56 PM
To: Adm13McCarthy, Gina
Cc: Stanislaus, Mathy;Matthew R. Fritz (fritz.matthew@epa.gov);Rupp, Mark;Distefano, Nichole;'Pieh, Lusen';Purchia, Liz;Natarajan, Nitin;Zito, Kelly;Strauss, Alexis
Subject: R9 Weekend Note

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On Jan 8, 2016, at 5:58 PM, Blumenfeld, Jared <BLUMENFELD.JARED@EPA.GOV> wrote:

Aliso Canyon Natural Gas Leak: Gov. Brown declared a state of emergency in Porter Ranch, the residential community closest to the Aliso Canyon facility. Cong. Sherman sent a second letter Jan. 5 to EPA, PHMSA, FERC, SoCalGas, CADiv. of Oil and Gas (DOGGR), So. Coast AQMD and the CA PUC, requesting the parties work together to stop the leak sooner. We participate in daily calls with SoCalGas, state and local agencies, led an incident-specific Regional response Team call Jan. 7, and plan for a similar National Response Team call Jan. 11. On Thursday, SoCalGas agreed to the terms of a So. Coast AQMD order which will be adopted at their board hearing Saturday morning, near the site. The order calls for increased capture and incineration of natural gas (via carbon adsorbers and thermal oxidizers), funding a health study on the potential impacts to the community, stepped-up air monitoring, and continuous monitoring of the leak with an infrared camera. The company will improve its leak detection, reporting and inspection practices, will withdraw the maximum amount of gas from the storage facility as quickly as possible, and provide records to So. Coast AQMD, including the 1,600 odor complaints it has received, the amount of gas it has injected and withdrawn from the facility. I had a call this morning with Senator Boxer and briefed Nichole on the outcomes.

Argonaut Mine, Jackson, CA: The US Army Corps of Engineers completed a structural assessment of the Argonaut tailings dam last week, given winter weather. Diagonal cracks were encountered in the arch buttresses.

Hawaii SRF: Hawaii DOH informed us they have met our interim targets in their Drinking Water SRF corrective action plan ahead of the Jan. 28 deadline. We withheld most of their FY15 capitalization grant; once we confirm DOH has met the targets, we will award the remaining FY15 grant funds.

Carbon Sequestration/Healthy Soils: next Wednesday, January 13, I'll tour the TomKat Ranch in Pescadero, CA to learn about its focus on sustainable land use, carbon sequestration, water management, and soil health.

Army Corps Meeting: next Friday, January 15, I'll meet in Los Angeles with the Army Corps of Engineers' Los Angeles District Commander, Col. Kirk Gibbs, to discuss Rosemont Mine.

Anaconda Mine, NV: We'll brief Congressman Amodei on the Anaconda Yerington Copper Mine Site and our recent letter to Gov. Sandoval regarding our NPL listing proposal. We plan to brief Congressman Hardy's office on January 12 (the site is in his district).

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Jared Blumenfeld
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Proboszcz, Angie

From: Blumenfeld, Jared
Sent: Friday, January 08, 2016 2:59 PM
To: Adm13McCarthy, Gina
Cc: Meiburg, Stan;Matthew R. Fritz (fritz.matthew@epa.gov);Rupp, Mark;Purchia, Liz;Distefano, Nichole;'Pieh, Lusen';Zito, Kelly;Strauss, Alexis
Subject: R9 Weekender

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Jared Blumenfeld
U.S. EPA
Regional Administrator
Pacific Southwest

415-947-8702



BRAD SHERMAN
UNITED STATES CONGRESS

PH: (202) 225-5911
FAX: (202) 225-5879

December 10, 2015

The Honorable Gina McCarthy
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Ave., N.W.
Washington, DC 20460

Dear Administrator McCarthy:

I am writing to request that the Environmental Protection Agency immediately investigate the unresolved gas leak at the Southern California Gas Co. natural gas storage facility in Aliso Canyon. I ask that the Environmental Protection Agency investigate the cause of the leak, and propose action to mitigate the threat to public health, and expedite the leak's repair.

For over six weeks, noxious gas emanating from a leaking well has been sickening residents of the Porter Ranch neighborhood of Los Angeles, causing headaches, nose bleeds and dizziness¹². A preliminary Environmental Health Assessment by the Los Angeles County Department of Public Health has confirmed the health threat, noting the "neurological, gastrointestinal, and respiratory symptoms that may result from the inhalation." More than 2,800 residents have inquired about relocation and over 1,200 have already relocated. The situation will only worsen, as Southern California Gas Co. estimates that the leak could continue for months.

The California Air Resources Board estimates that the leak is responsible for nearly 25% of California's daily methane emissions; as you know, methane is an important cause of global climate change. I am also concerned about reports of radon gas and benzene being released into the air.

An immediate investigation has become necessary due to the prolonged period of the leak, the apparent health impacts, and the lack of certainty over when the leak can be stopped.

I am aware that 40 CFR § 68.3 excludes storage facilities from regulation under the Risk Management Program. However, we believe that 42 U.S. Code § 7603, which allows the EPA to "issue such orders as may be necessary to protect public health or welfare or the environment," controls the determination here. A statutory provision inherently trumps any regulation. To be even clearer, the statute explicitly states, "Notwithstanding any other provision of this chapter, the Administrator... may... take such other action as may be necessary."

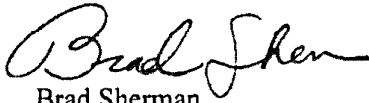
¹ Mendoza, Javier. "Natural gas leak that's sickening Valley residents could take months to fix." *Los Angeles Times*. November 20, 2015.

² Favot, Sarah. "Health officials: Porter Ranch gas leak may cause long-term health effects." *Los Angeles Daily News*. December 2, 2015.

Accordingly, it seems clear that you have the statutory authority to:

1. Commence an investigation,
2. Determine all necessary steps to protect the environment and public health, and
3. Require Southern California Gas Co. to implement all such steps.

Sincerely,

A handwritten signature in black ink that reads "Brad Sherman". The signature is fluid and cursive, with the first name "Brad" and last name "Sherman" clearly distinguishable.

Brad Sherman
Member of Congress

CC:

Department of Oil, Gas & Geothermal Resources
California Public Utilities Commission
South Coast Air Quality Management District
Los Angeles City Councilman Mitchell Englander
Los Angeles County Supervisor Michael Antonovich

EPA WEEKLY ADMINISTRATOR'S REPORT
January 15, 2016 – January 24, 2016

Priorities

During the week of January 18, EPA Region 9 representatives are continuing to participate in regular operational calls with local, state and company officials to stay updated on the Aliso Canyon (California) Natural Gas Storage Facility Methane Leak. As of the week of January 11, SoCal Gas has placed 2516 citizens in temporary housing, 1081 requests are in process, 1035 newly assigned to temporary home providers, 1172 are unassigned or uncalled. 744 residents have declined relocation or checked out and returned home. In addition, the Los Angeles Unified School District's Board of Education is expediting the temporary relocation of Castlebay Lane Charter and Porter Ranch Community School. School resumed on January 11.

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EPA WEEKLY ADMINISTRATOR'S REPORT
January 8, 2016 – January 17, 2016

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the 1990s, the number of people in the United States who are 65 years of age or older is projected to increase from 20 million to 35 million, and the number of people 75 years of age or older is projected to increase from 10 million to 15 million (U.S. Census Bureau, 1996). The number of people 85 years of age or older is projected to increase from 2 million to 4 million (U.S. Census Bureau, 1996). The number of people 90 years of age or older is projected to increase from 500,000 to 1 million (U.S. Census Bureau, 1996).

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Table 1. Demographic characteristics of study population

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Proboszcz, Angie

From: Weitz, Melissa
Sent: Monday, January 04, 2016 11:26 AM
To: Irving, Bill;DeFigueiredo, Mark
Cc: Waltzer, Suzanne;Hockstad, Leif
Subject: RE: Massive methane leak in CA

Follow Up Flag: Follow up
Flag Status: Flagged

We do. We include storage facility emissions, and storage well fugitive emissions specifically.

In 2013, CH₄ emissions from the storage segment were around 400,000 tons CH₄ (10 MMT CO₂e) and fugitive CH₄ emissions from storage wells were around 15,000 tons CH₄ (0.4 MMT CO₂e).

The leaking Aliso Canyon well has emitted about 90,000 tons CH₄ (2 MMT CO₂e) since October. If it is stopped in March (this is the most recent estimate I've heard), it will have emitted about 180,000 tons CH₄ (4.5 MMT CO₂e).

So, the leak from this well is much larger than the total emissions from storage wells in the inventory.

We have a stakeholder question on this issue in the draft memo on Transmission and Storage updates for the GHGI (to be released this week or next):

[REDACTED]

From: Irving, Bill
Sent: Monday, January 04, 2016 1:44 PM
To: Weitz, Melissa <Weitz.Melissa@epa.gov>; DeFigueiredo, Mark <DeFigueiredo.Mark@epa.gov>
Cc: Waltzer, Suzanne <Waltzer.Suzanne@epa.gov>; Hockstad, Leif <Hockstad.Leif@epa.gov>
Subject: FW: Massive methane leak in CA

FYI – I'm not sure David's last statement is accurate. Don't we include emissions from storage facilities in the inventory?

From: Reidmiller, David R [<mailto:ReidmillerDR@state.gov>]
Sent: Monday, January 04, 2016 10:57 AM
To: Stern, Todd D (S/SECC) <SternTD@state.gov>; Talley, Trigg <TalleyT@state.gov>; Lattimer, Timothy P <LattimerTP@state.gov>; Florini, Karen L <FloriniKL@state.gov>; Cerqueira, Julie <CerqueiralJ@state.gov>; Hochstrasser, Franz J. <HochstrasserFJ@state.gov>; Sierawski, Clare S <SierawskiCS@state.gov>; Schuler, Reed M <SchulerRM@state.gov>; Akhtar, Farhan H <AkhtarFH@state.gov>; Strait, Elan P <StraitEP@state.gov>; Rakestraw, Andrew R <RakestrawAR@state.gov>

Cc: Irving, Bill <Irving.Bill@epa.gov>; LeFranc, Maurice <LeFranc.Maurice@epa.gov>

Subject: Massive methane leak in CA

Todd et al –

You may very well have heard about this already, but I wanted to flag for your situational awareness.

For the past several months, there has been a massive methane leak in southern California. Some have likened it to an “invisible BP oil spill”. Scientists at NASA’s Jet Propulsion Lab (and others) have been tracking the leak, but stopping it – not unlike BP – poses serious technical challenges. If this leak were to continue for an entire year - at the current rates cited below (and if all the gas being leaked is methane) - it would emit roughly 0.4 Mt CH₄ or approx. 11 Mt CO₂e (<0.2% of current net US emissions, but roughly the annual emissions of Moldova or Luxembourg or Jamaica). It’s unclear how or whether EPA will be able to incorporate this in future inventories as it is not exactly a traditional source included in their methodologies.

MASSIVE CALIF. GAS LEAK WON'T BE PLUGGED FOR MONTHS: SoCal Gas will need at least two more months to fix a gas leak that is spewing natural gas into the air at the rate of 100,000 lbs/hr, according to [local news reports](#). The leak of the Aliso Canyon storage facility was discovered in October, and fixing it will require SoCal Gas to drill relief wells 8,500 feet into the ground to get beneath the ruptured pipeline to implement a fix. SoCal Gas has had to help 2,157 households relocate, and it's working on moving 1,184 more, [according](#) to the Wall Street Journal. The EPA will begin an [investigation](#) at the behest of Rep. Brad Sherman, whose district includes Porter Ranch. The South Coast Air quality Management District, which enforces state and federal clean air laws in the region, will hold a hearing next week.

http://motherboard.vice.com/read/why-we-cant-stop-the-enormous-methane-leak-flooding-la?utm_source=mbfb

David Reidmiller, PhD

Chief Climate Scientist

U.S. Department of State

Office of Global Change (OES/EGC)

Office: +1-202-647-3961

Mobile: +1-202-341-4709

reidmillerdr@state.gov

<http://www.state.gov/e/oes/climate/index.htm>

Proboszcz, Angie

From: Weitz, Melissa
Sent: Monday, December 14, 2015 2:10 PM
To: Gunning, Paul; Friedman, Kristina
Cc: DeFigueiredo, Mark; Kocchi, Suzanne
Subject: Background and one pager on Aliso Canyon Storage Well CH4 Leak
Attachments: Aliso Canyon Storage CH4 Leak.docx

Follow Up Flag: Follow up
Flag Status: Flagged

Please see attached one pager, and the link below to an LA Times article which gives a good overview of the Aliso Canyon Storage well leak issue.

<http://www.latimes.com/local/california/la-me-1121-gas-leak-20151121-story.html>

Proboszcz, Angie

From: Friedman, Kristina
Sent: Monday, December 14, 2015 3:03 PM
To: Weitz, Melissa; Gunning, Paul
Cc: DeFigueiredo, Mark; Kocchi, Suzanne
Subject: RE: Background and one pager on Aliso Canyon Storage Well CH4 Leak
Attachments: Aliso Canyon Background 12-14-15.docx

Follow Up Flag: Follow up
Flag Status: Flagged

Thanks, here's the final version we gave to Joe.

From: Weitz, Melissa
Sent: Monday, December 14, 2015 5:10 PM
To: Gunning, Paul <Gunning.Paul@epa.gov>; Friedman, Kristina <Friedman.Kristina@epa.gov>
Cc: DeFigueiredo, Mark <DeFigueiredo.Mark@epa.gov>; Kocchi, Suzanne <Kocchi.Suzanne@epa.gov>
Subject: Background and one pager on Aliso Canyon Storage Well CH4 Leak

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<http://www.latimes.com/local/california/la-me-1121-gas-leak-20151121-story.html>

Proboszcz, Angie

From: DeFigueiredo, Mark
Sent: Monday, December 14, 2015 1:19 PM
To: Weitz, Melissa
Subject: Cali NG storage leak
Attachments: Aliso.docx

Follow Up Flag: Follow up
Flag Status: Flagged

Here's the draft set of bullets that I put together in case we get asked. And maybe attach the LA times article.

Separately, here are the articles on the IR camera images.

EDF: <http://blogs.edf.org/energyexchange/2015/12/10/infrared-camera-reveals-huge-wafting-cloud-of-methane-over-californias-aliso-canyon/>

Politico:

FOOTAGE MAKES SOCAL METHANE LEAK VISIBLE: Ever wonder what a massive methane leak looks like? The non-profit groups Save Porter Ranch, Food & Water Watch, and Earthworks hired an infrared technician to film the massive SoCal Gas underground storage leak, now entering its 53rd day today. The footage [shows](#) color images of a beautiful Southern California day, and then switches to black and white infrared images of gas clouds rolling along the hills above Porter Ranch, a neighborhood of some 30,000 people. According to local news reports, the company says the leak doesn't put most of the residents in danger, though it has [offered](#) relocation assistance and air filters to families complaining of headaches, nose bleeds, and other symptoms that may be related to the leak. It's also inspired [an FAA flight restriction](#) and [concern](#) from the LA County Fire Department. SoCal Gas, a unit of Sempra Energy, says it will need three or four months to close the leak, which is 500 feet underground.

EPA WEEKLY CABINET REPORT
January 15, 2016 – January 24, 2016

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Priorities

During the week of January 18, EPA Region 9 representatives are continuing to participate in regular operational calls with local, state and company officials to stay updated on the Aliso Canyon (California) Natural Gas Storage Facility Methane Leak. As of the week of January 11, SoCal Gas has placed 2516 citizens in temporary housing, 1081 requests are in process, 1035 newly assigned to temporary home providers, 1172 are unassigned or uncalled. 744 residents have declined relocation or checked out and returned home. In addition, the Los Angeles Unified School District's Board of Education is expediting the temporary relocation of Castlebay Lane Charter and Porter Ranch Community School. School resumed on January 11.

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EPA WEEKLY CABINET REPORT
January 8, 2016 – January 17, 2016

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January 8, 2016 – January 17, 2016

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EPA WEEKLY CABINET REPORT
January 8, 2016 – January 17, 2016

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Proboszcz, Angie

From: Blumenfeld, Jared
Sent: Friday, January 15, 2016 2:56 PM
To: Adm13McCarthy, Gina
Cc: Stanislaus, Mathy;Fritz, Matthew;Rupp, Mark;Distefano, Nichole;Pieh, Lusen;Purchia, Liz;Natarajan, Nitin;Zito, Kelly;Strauss, Alexis
Subject: R9 Weekend Note

Follow Up Flag: Follow up
Flag Status: Flagged

Aliso Canyon Natural Gas Leak, Porter Ranch, CA: We continue to participate in daily calls with SoCal Gas, state and local agencies. RRT9 requested assistance from the NRT in the form of technical expertise from other agencies, such as the Department of Energy's National Laboratories, in the areas of gas capture and well-kills. Gov. Brown's office convened a meeting on January 15 at Porter Ranch at which senior state agency representatives spoke – we sent representative but will not be on panel. Nichole is working with EPW to schedule a briefing.

- On 13 January, the Region participated in an 'agency only' call during which the gas capture system was discussed. In answer to the question EPA has been posing – that is, which state or county entities are responsible for reviewing the gas capture plan for safety considerations, several participants suggested that the Los Angeles County Public Works Department and/or the County Fire Marshall may need to review the gas capture system design documents, to evaluate the design for electrical, mechanical and structural integrity, from a county building code standpoint. LA County Fire was going to follow up on this.
- Drilling has reached approximately 7800 feet. Ranging run #14 is being performed today. Relief well # 1 is on schedule for completion at the end of February or early March. Drilling has now slowed significantly because the ranging runs will have to be performed at a greater frequency to accurately establish the position of RW #1 in relation to SS-25. Drilling is occurring around the clock.
- Region 9 will have a formal review role for any Title V permit that is issued for the proposed gas capture system at the Well 25-SS location. This poses unique siting, design and potential safety issues.
- Relocations – SoCal Gas has received 4796 inquiries for relocation out of the affected area in Porter Ranch. SoCal Gas has placed occupants of 2485 residences into temporary housing, 1732 requests are in process with an additional 529 "pending resolution".

CA Water Quality Standards for Trash: On January 12, we approved the California State Water Resources Control Board's water quality standards for trash in state waters. These standards will prohibit the discharge of trash from municipal stormdrain systems, industrial and transportation facilities, and construction sites that are regulated under NPDES permits. California is the first state to adopt a trash control policy and water quality standards for trash. Here's the op-ed I wrote on this: <http://www.dailynews.com/opinion/20160113/how-californias-new-trash-control-policy-can-help-shrink-the-pacific-garbage-patch>

HDOH DWSRF: Hawaii Department of Health responded to our September 21, 2015, grant enforcement letter, in which EPA withheld the majority of HDOH's 2015 SRF capitalization grant funds. In order to receive the remainder of HDOH's 2015 allotment, we had required that HDOH commit at least \$28,283,883 in new assistance agreements and disburse \$7,674,832 between June 30, 2015-January 29, 2016. HDOH informed us that they had met the interim required targets, which we confirmed were met. We are prepared to award the remaining balance of HDOH's 2015 Drinking Water

allotment of \$8,098,680 pending receipt and approval of an amended grant application for these funds. Really good news that the communities will get the support they need!

BTW - CA DWSRF: The California State Water Resources Control Board informed us that they have reduced DWSRF unliquidated obligations to below \$160 million, which is the target they were required to meet by June 2016, the end of their corrective action plan. The program had a ULO of \$455 million in October 2012.

Climate Justice Alliance (CJA) Rally: Communities for a Better Environment, on behalf of CJA, requested a meeting with the Regional Administrator and Elizabeth Adams on January 19 on the Clean Power Plan. The group will hold a peaceful rally in front of the building. CJA member groups intend to hold similar rallies at all ten EPA regional offices on the same day.

Office of Civil Rights Public Meeting, Oakland: The Office of Civil Rights is organizing a series of public meetings to take comment on proposed changes to EPA's civil rights regulations. Region 9's meeting will take place on January 20 at the Oakland Downtown Marriott. Alexis Strauss and senior representatives of OCR and DOJ will give remarks.

EPA Border Children's Environmental Health Symposium, San Diego, CA: I will give opening remarks at the Children's Environmental Health Symposium, which will focus on children's environmental health risks found within the California/Baja California and Arizona/Sonora regions. This symposium will discuss environmental health issues in the border region, how prenatal and childhood exposures can impact children's health and development, and what participants can do in their respective roles to address or mitigate children's environmental health risks

Jared Blumenfeld
U.S. EPA
Regional Administrator
Pacific Southwest
415-947-8702

From: Mr. Brian Babayans**Submitted:** 12/11/2015 3:15 PM EST**Email:** [REDACTED]**Phone:** ([REDACTED])**Address:** [REDACTED] (Valid)**Subject:** Environment**Message:** Dear President Obama,

I'm writing to bring to your attention a serious environmental problem happening right now in the San Fernando Valley, specifically Porter Ranch. There has been a huge gas leak of natural gas from the Socal Gas company's negligent drilling and pumping of gas into the reservoirs in the Aliso Canyon area, and a pipe underground has been severed causing a serious amount of natural gas (along with all the chemicals added to it such as mercaptans and methane to name a few) to be pouring into the environment.

It has been all over the news here in Socal but I'm not sure you are aware of it so I'm writing this letter to inform you.

The gas company continues to state that the chemicals in the gas will not harm anyone but EVERYONE in this area is getting sick, including myself. We are exposed daily to the equivalent of carbon dioxide and methane gas equivalent to 200,000 cars driven a year in a single day.

I highly suggest you look into this. The gas company has offered to relocate everyone for free but they said they have no idea how long it will take to fix the leak.

There is already a class action lawsuit being filed and I'm sure you can contact the law firm of R. Rex Parris. Here is their info:

R. REX PARRIS LAW FIRM
43364 10th Street West
Lancaster, California 93534

Here is a link to the article about the lawsuit:

<http://globenewswire.com/news-release/2015/12/07/793570/0/en/Two-High-Powered-Attorneys>

The health issues of everyone are of great concern. I myself have the same symptoms everyone else has, which are burning eyes, bloody noses, burning throat, chronic fatigue, nausea, dizziness and headaches. Children are suffering the worst and parents are beyond angry and concerned.

Please take a look into this serious matter.

I also read that the greenhouse emissions from this leak are 100 times worse than anything generated by a city.

Perhaps you have teams of scientists and engineers who can help them fix this leak sooner.

thank you for your concern.

Brian Babayans

White House Agency Liaison Casework

- [Close Window](#)
- [Print This Page](#)

Case: 20151211-06613367

Case Information

Contact Name	Brian Babayans	Case Owner	EPA Agency Representative
Contact Phone	[REDACTED]	Status	In Progress
Contact Email	[REDACTED]	Agency Tracking ID	
Contact Address	[REDACTED]	Agency Detail	

Description Information

Who are you trying to contact? The White House and President Obama

Description Dear President Obama,

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Lancaster, California 93534

Here is a link to the article about the lawsuit:

<http://globenewswire.com/news-release/2015/12/07/793570/0/en/Two-High-Powered-Attorneys-Join-Class-Action-Lawsuit-Against-SoCalGas.html>

The health issues of everyone are of great concern. I myself have the same symptoms everyone else has, which are burning eyes, bloody noses, burning throat, chronic fatigue, nausea, dizziness and headaches. Children are suffering the worst and parents are beyond angry and concerned.

Please take a look into this serious matter.

I also read that the greenhouse emissions from this leak are 100 times worse than anything generated by a city.

Perhaps you have teams of scientists and engineers who can help them fix this leak sooner.

thank you for your concern.

Brian Babayans

System Information

Case Origin	Contact Us	Assigned To Agency Date	1/7/2016 7:37 PM
Case Record Type	Agency Portal	Date/Time Closed	
		Assigned To Agency Age	3.7
		Age Alert	
		Priority	
		Subject	Environment

Contact Information

Contact Information

Name	Mr. Brian Babayans	Email	[REDACTED]
Middle Name		Phone	[REDACTED]
Suffix			
Appellation			
Override Google Verification	<input type="checkbox"/>		

Address Information

Mailing Unit Type		Other Unit Type	
Mailing Unit #		Other Unit #	
Mailing Address	[REDACTED] [REDACTED] [REDACTED]	Other Address	

Special Handling

Military Status	
Military Branch	
Rank	

System Information

EPA WEEKLY ADMINISTRATOR'S REPORT
January 15, 2016 – January 24, 2016

Priorities

During the week of January 18, EPA Region 9 representatives are continuing to participate in regular operational calls with local, state and company officials to stay updated on the Aliso Canyon (California) Natural Gas Storage Facility Methane Leak. As of the week of January 11, SoCal Gas has placed 2516 citizens in temporary housing, 1081 requests are in process, 1035 newly assigned to temporary home providers, 1172 are unassigned or uncalled. 744 residents have declined relocation or checked out and returned home. In addition, the Los Angeles Unified School District's Board of Education is expediting the temporary relocation of Castlebay Lane Charter and Porter Ranch Community School. School resumed on January 11.

[REDACTED]

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EPA WEEKLY ADMINISTRATOR'S REPORT
January 8, 2016 – January 17, 2016

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During the weeks of January 4 and January 11, Region 9 is continuing to participate in regular operations calls with local, state and other officials regarding the Aliso Canyon (California) Natural Gas Storage Facility methane leak. SoCalGas continues to drill 2 relief wells, withdraw gas to reduce overall storage reservoir pressure and leak flow rate, and review engineering solutions to capture gas from the surface. Region 9 developed a desk statement explaining EPA authorities and role in the issue.

[REDACTED]

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MEMORANDUM

**SUBJECT: Southern California Gas Company Methane Gas Release
Aliso Canyon Natural Gas Storage Facility**

**FROM: Jared Blumenfeld
Regional Administrator, Region 9**

**TO: Matthew Fritz
Chief of Staff**

Overview: On 23 October 2015, an uncontrolled natural gas release was discovered at the Southern California Gas Company (SoCal Gas) Natural Gas Storage Facility at Aliso Canyon, an old oil field in Los Angeles County. SoCal Gas injects natural gas into abandoned oil reservoirs for storage and then withdraws the gas for transmission and sale. SoCal Gas is a subsidiary of Sempra Energy Utilities.

The Aliso Canyon storage facility contains 115 gas withdrawal/injection wells. The leaking well is over 8000 feet deep. Aliso Canyon has a total storage capacity of 86 bcf (billion cubic feet), the second largest natural gas storage facility in the United States.

Porter Ranch, an residential community of approximately 30,000 people, is located 1 mile away. More than 1,800 families have been relocated by the gas company and 1,000 remain on a waiting list. Two local elementary schools with nearly 2,000 schoolchildren and staff are slated to be moved to other schools in January.

Current Status: SoCal Gas is the responsible party and is attempting to plug the leaking well with a team of well-control contractors. SoCal Gas is working to kill the well from the top and drilling relief wells to kill the well from the bottom. SoCal has 157 people in their Incident Action Plan working on this relief effort.

SoCal Gas has attempted multiple 'top kill' operations, none successful. They are concerned about degrading the integrity of the well bore. The next effort will pump material such as ball bearings in heavy mud down the wellbore in an attempt to stop the flow of gas.

SoCal Gas is drilling two relief wells. The relief well, if successful, will intercept the bottom of the leaking well and pump in cement. This technique has had great success in controlling blow outs. The drilling operation continues around the clock and the relief wells are estimated to take 3-4 months to complete.

Environmental and Public Health Issues: Estimates of how much methane is leaking are not particularly reliable but are reported to be on the order of 2-3 million pounds per day. Measurements of methane in nearby residential areas show levels substantially below the flammability limit and that do not represent an acute health risk. However, exposure to the mercaptan odorant additive in the natural gas can produce symptoms such as nausea, headaches, vomiting, abdominal discomfort, respiratory irritation and dizziness. Residents have reported effects consistent with short term mercaptan exposure. The LA County Department of Public Health has determined that the emissions from this incident are causing health effects to some Porter Ranch residents and is requiring that SoCal Gas provide temporary relocation “As the duration of exposure increases, these trace levels can produce significant long-term health effects,” said Department of Public Health Interim Director Cynthia Harding. “As this incident has moved from a short-term exposure event resolved within days, to now a long-term event potentially lasting months, supplemental monitoring of potentially harmful trace chemicals is warranted.”

Regulatory Actions:

State Agencies: Division of Oil, Gas and Geothermal Resources (DOGGR), Department of Conservation, Natural Resources Agency; California Public Utility Commission (CPUC); California Office of Emergency Services (OES); California Environmental Protection Agency (Cal/EPA).

Local Agencies: Los Angeles County Certified Unified Program Agency (LA County CUPA) Los Angeles County Fire/HazMat; City of Los Angeles; South Coast Air Quality Management District (SCAQMD); Los Angeles County Department of Public Health

DOGGR has issued two orders to SoCal Gas, to provide information on the leaking well (18 November) and to develop plans for expeditiously capturing the escaping gas, stopping the leak and communicating with state and local regulators (10 December). The 10 December order includes the convening of experts from the national laboratories (Lawrence Berkeley, Lawrence Livermore and Sandia) to review data and assist DOGGR in evaluating SoCal Gas’s plans for stopping the leak.

The CPUC is conducting an investigation to assess SoCal Gas actions before and after the well failure that resulted in the methane gas release. This includes public notification and issues related to operation and maintenance of the storage facility. CPUC has requested information from SoCal Gas and, in coordination with DOGGR, directed SoCal Gas to hire an independent third party to conduct a root-cause analysis of the well blow-out.

The Los Angeles County Department of Public Health ordered SoCal Gas to provide temporary relocation to residents. As of December 1st, 778 households had either relocated (282) or were in

the process of relocating (496). SoCal Gas has established a community center in Porter Ranch to answer questions and assist residents with temporary relocation and claims.

The Los Angeles City Attorney announced a lawsuit against SoCal Gas for its handling of the methane leak and the SCAQMD has cited SoCal Gas for a public nuisance due to the odors from the mercaptan additive.

Cal/EPA has contacted the Interagency Modeling and Atmospheric Assessment Center (IMAAC) for possible assistance in modeling the methane dispersion. IMAAC is a federal interagency group with expertise in plume and atmospheric modeling.

Federal Actions:

The Region is participating in daily operational calls and providing daily summaries. On 15 December, two on-scene coordinators participated in a site tour with the Los Angeles County Fire and Hazardous Materials Unit and Lawrence Livermore National Laboratory. The most direct federal authority is held by the Department of Transportation, Office of Pipeline and Hazardous Materials Safety Administration. However the DOT authority has been delegated to California and it is not clear what action DOT is willing to take in this case.

[REDACTED]

[REDACTED]

On 18 December the Region issued an information request to SoCal Gas pursuant to the Clean Air Act Section 114.

Congressional Interest:

Region 9 is drafting a response to a letter from Congressman Sherman who is requesting an active EPA role in the response. We have also responded to inquiries from Senator Boxer's office.

[REDACTED]

Proboszcz, Angie

From: Manzanilla, Enrique
Sent: Tuesday, December 22, 2015 11:50 AM
To: Cheatham, Reggie;Natarajan, Nitin;Tulis, Dana
Cc: Jordan, Deborah;Adams, Elizabeth;Johnson, Kathleen;Quast, Sylvia;Meer, Daniel;Moore, Letitia
Subject: Fwd: Aliso Canyon - [REDACTED]
Attachments: Aliso Canyon - [REDACTED]

Follow Up Flag: Follow up
Flag Status: Flagged

Looping.....

Sent from my iPhone

Begin forwarded message:

From: "Blumenfeld, Jared" <BLUMENFELD.JARED@EPA.GOV>
Date: December 22, 2015 at 11:43:22 AM PST
To: "Strauss, Alexis" <Strauss.Alexis@epa.gov>, "Manzanilla, Enrique" <Manzanilla.Enrique@epa.gov>
Subject: FW: Aliso Canyon - [REDACTED]

From: Blumenfeld, Jared
Sent: Monday, December 21, 2015 5:10 PM
To: Matthew R. Fritz (fritz.matthew@epa.gov) <fritz.matthew@epa.gov>
Subject: Aliso Canyon - [REDACTED]

Proboszcz, Angie

From: Manzanilla, Enrique
Sent: Wednesday, December 16, 2015 1:24 PM
To: Johnson, Kathleen;Quast, Sylvia
Cc: Meer, Daniel
Subject: FW: Alison Canyon Situational Update
Attachments: Aliso Canyon Update 12.16.docx

Follow Up Flag: Follow up
Flag Status: Flagged

FYI

Enrique Manzanilla
Director, Superfund Division
US EPA Region 9 - Pacific Southwest
(415) 972 3843

From: Meer, Daniel
Sent: Wednesday, December 16, 2015 12:42 PM
To: Manzanilla, Enrique <Manzanilla.Enrique@epa.gov>; Lawrence, Kathryn <Lawrence.Kathryn@epa.gov>; Allen, HarryL <Allen.HarryL@epa.gov>; Johnstone, Jeremy <Johnstone.Jeremy@epa.gov>
Cc: Lindsay, Nancy <Lindsay.Nancy@epa.gov>; Irizarry, Gilberto <Irizarry.Gilberto@epa.gov>; Schumann, Jean <Schumann.Jean@epa.gov>; Lee, Eugene <Lee.Eugene@epa.gov>; Zabel, Allan <Zabel.Allan@epa.gov>
Subject: RE: Alison Canyon Situational Update

Use this version. Dan

Daniel A. Meer, Assistant Director
Superfund Division
Emergency Response, Preparedness and Prevention Branch
415.972.3132 (O)
415.971.6792 (C)

From: Meer, Daniel
Sent: Wednesday, December 16, 2015 12:33 PM
To: Manzanilla, Enrique; Lawrence, Kathryn; Allen, HarryL; Johnstone, Jeremy
Cc: Lindsay, Nancy; Irizarry, Gilberto; Schumann, Jean; Lee, Eugene
Subject: Alison Canyon Situational Update

Update for 16 December 2015. New information is shaded yellow.

Dan

Daniel A. Meer, Assistant Director
Superfund Division
Emergency Response, Preparedness and Prevention Branch
415.972.3132 (O)
415.971.6792 (C)

PRE DECISIONAL – ATTORNEY CLIENT PRIVILEGE – DO NOT RELEASE

Southern California Gas Company Methane Release

Aliso Canyon Natural Gas Storage Facility

16 December 2015

Overview: On 23 October 2015, an uncontrolled natural gas release was discovered at the Southern California Gas Company (SoCal Gas) Natural Gas Storage Facility at Aliso Canyon, an old oil field in the northern San Fernando Valley, Los Angeles County. SoCal Gas injects natural gas into the abandoned oil reservoir for storage and then withdraws the gas for transmission and sale. SoCal Gas is a subsidiary of Sempra Utilities.

The Aliso Canyon storage facility is located near Porter Ranch, an affluent residential community of approximately 30,000 people. The nearest Porter Ranch residents that are being affected live approximately 1 mile away and 1200 feet below the leaking wellhead.

The Aliso Canyon facility contains 115 gas withdrawal/injection wells and the well that is leaking, Well SS 25, is over 8000 feet deep. Aliso Canyon has a total storage capacity of 86 bcf (billion cubic feet) of natural gas, one of the largest storage facilities in the United States.

Levels of methane, the principal component of natural gas, are being monitored in the residential areas and currently do not represent a significant public health threat.

Current Status:

Well Head Prep: Work continues on preparing a walkway to allow safe access to the well head. They are building a 100 foot bridge for this purpose. High northerly winds are making it difficult to run equipment to the wellhead, so progress is slow.

Relief Wells: Relief well is on schedule and is currently drilled to 3850'. Casing is in the ground, cemented and logged, to approximately 1845'. There were some anomalies on the well log and the cemented section will be re logged. A second relief well site has been identified and grading has begun to prepare the drill pad.

Kill Shot Prep: They continue grading the well pad and bringing in equipment for the next 'top kill' attempt. This includes pumps and the heavy mud that they plan to pump into the well.

Pressure Regulation: SoCal Gas continues to withdraw gas from the facility at approximately 1 bcf/day to reduce pressure around SS-25. The top hole pressure is estimated at 1420 psi and bottom hole pressure is estimated at 1800 psi.

SoCal Gas Company has a team of well control experts that are attempting to plug the leaking well. However complex geology of the area is complicating the effort. SoCal Gas is currently

drilling two relief wells that will be used to divert gas flow away from the leaking well, and subsequently heavy muds and fluid will be pumped into the leaking well, to stop the methane release (bottom kill). The leaking well will then be permanently plugged with cement. The drilling operation continues around the clock and the relief well effort is estimated to take 3-4 months to complete. SoCal Gas is also preparing for a 'top kill' attempt, possibly early next week. They have attempted several top kills without success.

Environmental and Public Health Issues: Estimates of how much methane is leaking are not particularly reliable but are reported to be on the order of 2-3 million pounds per day. Measurements of methane in nearby residential areas show levels that are substantially below the flammability limit and that do not represent a current health risk. However, exposure to the mercaptan odorant additive in the natural gas can produce symptoms such as nausea, headaches, vomiting, abdominal discomfort, respiratory irritation and dizziness and residents have reported effects that are consistent with short term mercaptan exposure. The LA County Department of Public Health has determined that the emissions from this incident are causing a health effects to some Porter Ranch residents.

Regulatory Actions: A large group of state and local regulatory agencies and jurisdictions are involved with the response to this methane leak.

State Agencies:

Division of Oil, Gas and Geothermal Resources, Department of Conservation,
Natural Resources Agency

California Office of Emergency Services;

California Environmental Protection Agency.

Local Agencies:

Los Angeles County Certified Unified Program Agency (LA County CUPA)

Los Angeles County Fire/HazMat

City of Los Angeles

South Coast Air Quality Management District (SCAQMD)

Los Angeles County Department of Public Health

The Natural Resources Agency, DOGGR has issued two orders to SoCal Gas, to provide information on the leaking well (18 November) and to develop plans for expeditiously capturing the escaping gas, stopping the leak and communicating with state and local regulators (10 December). The 10 December order includes the convening of experts from the national laboratories (Lawrence Berkeley, Lawrence Livermore and Sandia) to review data and assist DOGGR in evaluating SoCal Gas's plans for stopping the leak.

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The Los Angeles City Attorney announced a lawsuit against SoCal Gas for its handling of the methane leak and the SCAQMD has cited SoCal Gas for a public nuisance due to the odors from the mercaptan additive.

Cal/EPA has contacted the Interagency Modeling and Atmospheric Assessment Center (IMAAC) for possible assistance in modeling the methane dispersion. IMAAC is a federal interagency with expertise in plume and atmospheric modeling.

Next Steps:

OSCs Moxley and Musante attended a site tour on 12/16 with LA County Fire/HazMat, Lawrence Livermore National Laboratory and the California Department of Conservation.

The Region's CAA 114 information request should be ready for signature by COB 12/17.

The Region is holding daily situational update calls during the work week, starting on 12/17, at 1100 Pacific time. The Region is also participating in the daily ops call with SoCal Gas.

The Emergency Response, Preparedness and Prevention Branch has assigned an on-scene coordinator and an emergency preparedness and prevention inspector to sit in on the daily operational calls and provide daily summaries. We will develop a staffing plan that will describe how we might bring USEPA assets to assist, if we get a request from California.

[REDACTED]

On 16 December two OSCs will participate with California agencies (DOGGR, Department of Conservation) and representatives from the National Labs (Lawrence Berkeley and Lawrence Livermore) on an informational site tour of the Aliso Canyon leak site.

Proboszcz, Angie

From: Manzanilla, Enrique
Sent: Wednesday, December 16, 2015 1:01 PM
To: Johnson, Kathleen;Adams, Elizabeth;Minor, Dustin
Subject: Fwd: Alison Canyon Situational Update
Attachments: Aliso Canyon Update 12.16.docx; ATT00001.htm

Follow Up Flag: Follow up
Flag Status: Flagged

Sent from my iPhone

Begin forwarded message:

From: "Meer, Daniel" <Meer.Daniel@epa.gov>
Date: December 16, 2015 at 12:41:43 PM PST
To: "Manzanilla, Enrique" <Manzanilla.Enrique@epa.gov>, "Lawrence, Kathryn" <Lawrence.Kathryn@epa.gov>, "Allen, HarryL" <Allen.HarryL@epa.gov>, "Johnstone, Jeremy" <Johnstone.Jeremy@epa.gov>
Cc: "Lindsay, Nancy" <Lindsay.Nancy@epa.gov>, "Irizarry, Gilberto" <Irizarry.Gilberto@epa.gov>, "Schumann, Jean" <Schumann.Jean@epa.gov>, "Lee, Eugene" <Lee.Eugene@epa.gov>, "Zabel, Allan" <Zabel.Allan@epa.gov>
Subject: RE: Alison Canyon Situational Update

Use this version. Dan

Daniel A. Meer, Assistant Director
Superfund Division
Emergency Response, Preparedness and Prevention Branch
415.972.3132 (O)
415.971.6792 (C)

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California Office of Emergency Services;

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[REDACTED]

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Proboszcz, Angie

From: Glenn, William
Sent: Friday, January 22, 2016 1:21 PM
To: Meer, Daniel;COHEN, Deborra;Keener, Bill;Nazmi, Niloufar
Cc: Mogharabi, Nahal;Zito, Kelly;Johnstone, Jeremy;Lawrence, Kathryn;Gaudario, Abigail
Subject: RE: Porter Ranch Alyso Canyon Methane Gas Leak

Follow Up Flag: Follow up
Flag Status: Flagged

Hi Dan,

That's our goal – my thought was to include you just so you (or someone in the program) would have awareness of the kinds of requests that are coming to the Agency. If you'd rather, we can just let you know about the stickiest ones.

Bill

Bill Glenn
Chief, Web + Internal Communications
Office of Public Affairs
U.S. EPA, Pacific Southwest
glenn.william@epa.gov / (415) 947-4254

From: Meer, Daniel
Sent: Friday, January 22, 2016 1:04 PM
To: Glenn, William <Glenn.William@epa.gov>; COHEN, Deborra <Cohen.Deborra@epa.gov>; Keener, Bill <Keener.Bill@epa.gov>; Nazmi, Niloufar <Nazmi.Niloufar@epa.gov>
Cc: Mogharabi, Nahal <MOGHARABI.NAHAL@EPA.GOV>; Zito, Kelly <ZITO.KELLY@EPA.GOV>; Johnstone, Jeremy <Johnstone.Jeremy@epa.gov>; Lawrence, Kathryn <Lawrence.Kathryn@epa.gov>; Gaudario, Abigail <Gaudario.Abigail@epa.gov>
Subject: RE: Porter Ranch Alyso Canyon Methane Gas Leak

Hi All – I would ask that you vet the inquiries to see if they can be handled by OPA directly. OPA can steer people to FEMA, LA County Public Health or other agencies as easy as we can. Thanks, Dan

Daniel A. Meer, Assistant Director
Superfund Division
Emergency Response, Preparedness and Prevention Branch
415.972.3132 (O)
415.971.6792 (C)

From: Glenn, William
Sent: Friday, January 22, 2016 12:42 PM
To: COHEN, Deborra; Keener, Bill; Nazmi, Niloufar
Cc: Mogharabi, Nahal; Meer, Daniel; Zito, Kelly
Subject: RE: Porter Ranch Alyso Canyon Methane Gas Leak

Thanks, Deb. I'm thinking as issues arise, it might be a good idea to also routinely loop in Dan Meer as well.

Here are those links you sent to Dan, in case they're useful for folks. I've also included the statement from a couple weeks back that I believe we've been using as a basis for responses to public inquiries – just in case anyone is aware of any new information we should be including.

<http://www.caloes.ca.gov/ICESite/Pages/Aliso-Canyon.aspx> California Office of Emergency Services

<http://www.aqmd.gov/home/regulations/compliance/aliso-canyon-update> South Coast Air Quality Mgt District

http://oehha.ca.gov/public_info/emergency/alisocanyon.html California Office of Environmental Health Hazard Assessment

http://oehha.ca.gov/public_info/emergency/pdf/AlisoCanyonPorterRanchFAQ01152016.pdf California Office of Environmental Health Hazard Assessment

<http://content.govdelivery.com/accounts/USNLMTEH/bulletins/1307102?reqfrom=share> National Library of Medicine compilation of health and toxicological data

U.S. EPA involvement in the Aliso Canyon natural gas leak response

California state and local agencies are on the forefront of the response to the Aliso Canyon natural gas leak. They include the California Office of Emergency Services (Cal OES), California Division of Oil, Gas and Geothermal Resources (DOGGR), the South Coast Air Quality Management District, the County of Los Angeles Fire and Public Health Departments, the City of Los Angeles, California Public Utilities Commission (CPUC), California Air Resources Board (CARB), California Energy Commission (CEC), Division of Occupational Safety and Health (Cal/OSHA), and the Office of Environmental Health Hazard Assessment (OEHHHA). Please see the California Office of Emergency Services website for the latest information: (<http://www.caloes.ca.gov/ICESite/Pages/Aliso-Canyon.aspx>).

The U.S. Environmental Protection Agency is participating in daily operational calls with these local and state regulators and Southern California Gas Company to stay abreast of developments in controlling the gas release and assisting local residents. On Dec. 18, U.S. EPA Region 9 sent a federal Clean Air Act information request letter to Southern California Gas Company for additional data and documents related to the facility and its operation. EPA is currently reviewing the information submitted and expects to receive additional information from the company in coming days. After completing its review of this information and in consultation with the state and local regulators already active on the scene, EPA will determine the appropriate next steps.

Bill Glenn
Chief, Web + Internal Communications
Office of Public Affairs
U.S. EPA, Pacific Southwest
glenn.william@epa.gov / (415) 947-4254

From: COHEN, Deborra

Sent: Friday, January 22, 2016 12:32 PM

To: Keener, Bill <Keener.Bill@epa.gov>; Nazmi, Niloufar <Nazmi.Niloufar@epa.gov>; Glenn, William <Glenn.William@epa.gov>

Cc: Mogharabi, Nahal <MOGHARABI.NAHAL@EPA.GOV>

Subject: RE: Porter Ranch Alyso Canyon Methane Gas Leak

Hi, Dan Meer said he would respond. I didn't cc Bill Keener or Nahal on my email to Dan.
Bill K, Nahal, Niloufar and Bill G – in general, should I include all 4 of you in emails pertaining to Porter Ranch?
Bill K and Nahal, do you want me to forward the email I sent to Dan Meer? It contained a list of several website links to the resources that have been established by South Coast, Cal OES, OEHA, NLM.

Deborra Cohen

Director, Environmental Information Center / Library

Cohen.Deborra@epa.gov / 415-972-3655

<http://www.epa.gov/region9/library>

U.S. EPA Region 9 Library / 75 Hawthorne St. / San Francisco, CA 94105

From: Keener, Bill

Sent: Friday, January 22, 2016 12:18 PM

To: Nazmi, Niloufar <Nazmi.Niloufar@epa.gov>; COHEN, Deborra <Cohen.Deborra@epa.gov>; Glenn, William <Glenn.William@epa.gov>

Cc: Mogharabi, Nahal <MOGHARABI.NAHAL@EPA.GOV>

Subject: RE: Porter Ranch Alyso Canyon Methane Gas Leak

And looping in Nahal for situational awareness.

Bill Keener

Office of Public Affairs

U.S. EPA - Region 9

San Francisco, CA

Phone: (415) 972-3940

From: Nazmi, Niloufar

Sent: Friday, January 22, 2016 7:44 AM

To: COHEN, Deborra <Cohen.Deborra@epa.gov>; Glenn, William <Glenn.William@epa.gov>

Cc: Keener, Bill <Keener.Bill@epa.gov>

Subject: Fwd: Porter Ranch Alyso Canyon Methane Gas Leak

This is a citizen inquiry I was referred to us from headquarters. If I should be forwarding it to someone else please let me know.

Niloufar

Niloufar Nazmi

U.S. Environmental Protection Agency

Desk: [415.972.3684](tel:415.972.3684) | Mobile: 415.328.1143 |

Begin forwarded message:

From: "Dennis, Allison" <Dennis.Allison@epa.gov>

Date: January 22, 2016 at 7:10:16 AM PST

To: "Nazmi, Niloufar" <Nazmi.Niloufar@epa.gov>

Subject: FW: Porter Ranch Alyso Canyon Methane Gas Leak

Hi Nilofaur,

Can you get this citizen inquiry to the right person in r9?

-----Original Message-----

From: Wieder, Jessica

Sent: Friday, January 22, 2016 10:07 AM

To: Dennis, Allison <Dennis.Allison@epa.gov>

Cc: Egidi, Philip <Egidi.Philip@epa.gov>

Subject: FW: Porter Ranch Alyso Canyon Methane Gas Leak

Allison,

Can you forward this public question to the appropriate contact in Region 9? It was sent to one of my radiation technical experts. Thank you. - Jess

From: Roberta [REDACTED]

Sent: Saturday, January 16, 2016 9:40 PM

To: Egidi, Philip <Egidi.Philip@epa.gov>

Subject: Porter Ranch Alyso Canyon Methane Gas Leak

Egidi, I emailed H.E.E.T. and they referred me to you.

I emailed them to thank them for coming to the San Fernando Valley area to take readings of the methane gas that is leaking from Porter Ranch and posting the video. We are concerned residents of the San Fernando Valley, trying to gather all the information we can, since governmental authorities seem to have their lips sewn shut.

I downloaded the air quality readings from the So Cal Gas website, but do not have the scientific background to decipher the information. Is there anyone there that can help us with that?

Or, can you give us information as to how to protect ourselves, (flammable gas detectors, NBC gas masks, access to number of animal and human illnesses and or deaths?).

We have been awaiting to hear back from our friend Caroline regarding autopsy/toxicology results of her cousin Gwen, who lived in Porter Ranch and was VERY ILL during the holiday. Gwen spent Christmas and New Year with her cousin Caroline in Big Bear and displayed symptoms of nausea, vomiting, headaches and hot and cold flashes. On January 1st Caroline noticed her cousin stopped breathing and had to give her CPR. Caroline called the ambulance and Gwen died either on the way to the hospital or after she got there.

Please help us in any way you can!

Thank You, Roberta Griego
[REDACTED]

Jessica Wieder
U.S. EPA
Radiation Protection Program
Center for Radiation Information and Outreach
w: 202-343-9201
c: 202-420-9353

From: Egidi, Philip
Sent: Friday, January 22, 2016 9:52 AM
To: Wieder, Jessica
Cc: Peake, Tom; Schultheisz, Daniel
Subject: Re: Porter Ranch Alyso Canyon Methane Gas Leak

To my knowledge, it has not been passed along yet...

PVE

From: Wieder, Jessica
Sent: Friday, January 22, 2016 9:25 AM
To: Egidi, Philip
Cc: Peake, Tom; Schultheisz, Daniel
Subject: Re: Porter Ranch Alyso Canyon Methane Gas Leak

Just got back from travel. Has this been passed along? If not, let me know and I will send it to the region.

Jess

Jessica Wieder
U.S. Environmental Protection Agency
Radiation Protection Program
202-343-9201
m: 202-420-9353

Sent from my iPhone

On Jan 19, 2016, at 9:14 AM, Egidi, Philip
<Egidi.Philip@epa.gov<<mailto:Egidi.Philip@epa.gov>>> wrote:

Not sure who to hand this off to, IED or the Region?

Discuss.

PVE

Philip Egidi

Environmental Scientist

U.S. Environmental Protection Agency

Radiation Protection Division

Washington, DC

(202) 343-9186 (work)

(970) 209-2885 (Cell)

"The health of the people is the highest law."

Cicero (106 - 43 BC)

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To: Egidi, Philip <Egidi.Philip@epa.gov<<mailto:Egidi.Philip@epa.gov>>>
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Please help us in any way you can!

Thank You, Roberta Griego



Proboszcz, Angie

From: Brock, Frank
Sent: Wednesday, January 20, 2016 12:50 PM
To: Johnstone, Jeremy
Subject: RE: Aliso Canyon Gas Leak - Information Request - CONTAINS CBI - 2nd of 2 parts

Follow Up Flag: Follow up
Flag Status: Flagged

Great-thanks!

Frank Brock

Geologist
Underground Injection Control Program
EPA Region 2
290 Broadway, 20th Floor
New York, NY 10007
brock.frank@epa.gov
Office: (212) 637-3762
Fax: (212) 637-4211

From: Johnstone, Jeremy
Sent: Wednesday, January 20, 2016 3:50 PM
To: Brock, Frank <Brock.Frank@epa.gov>
Subject: RE: Aliso Canyon Gas Leak - Information Request - CONTAINS CBI - 2nd of 2 parts

Thanks for checking but no, it is not marked CBI and I received it via channels other than through their response to our information request.

Jeremy Johnstone
Environmental Engineer
Emergency Prevention and Preparedness Section (Mail Code SFD-9-3)
U.S. Environmental Protection Agency, Region 9
75 Hawthorne Street
San Francisco, CA 94105
Tel: 415-972-3499
Cell: 415-816-6584
email: johnstone.jeremy@epa.gov

From: Brock, Frank
Sent: Wednesday, January 20, 2016 12:38 PM
To: Johnstone, Jeremy <Johnstone.Jeremy@epa.gov>
Subject: RE: Aliso Canyon Gas Leak - Information Request - CONTAINS CBI - 2nd of 2 parts

Jeremy: I received a request from State of New York to share the well schematic you provided for SS-25. I had thought I'd seen it online somewhere, but could not find again before you sent it.

In any case, just wanted to check with you to see if the well schematic showing the suspected flowpath for the leaking gas is CBI. Thanks! Frank

Frank Brock

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New York, NY 10007
brock.frank@epa.gov
Office: (212) 637-3762
Fax: (212) 637-4211

From: Johnstone, Jeremy
Sent: Thursday, January 14, 2016 1:48 PM
To: Brock, Frank <Brock.Frank@epa.gov>
Subject: RE: Aliso Canyon Gas Leak - Information Request - CONTAINS CBI - 2nd of 2 parts

Perhaps the attached will help.

Cheers,
Jeremy

Jeremy Johnstone
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75 Hawthorne Street
San Francisco, CA 94105
Tel: 415-972-3499
Cell: 415-816-6584
email: johnstone.jeremy@epa.gov

From: Brock, Frank
Sent: Thursday, January 14, 2016 8:54 AM
To: Johnstone, Jeremy <Johnstone.Jeremy@epa.gov>
Subject: RE: Aliso Canyon Gas Leak - Information Request - CONTAINS CBI - 2nd of 2 parts

Thanks Jeremy!! Concerning Attachment 3D, no problem-hold off on that.

Concerning 3C: I was more interested in the downhole well construction, including depths that casing was set, amount of cement on the casing, etc.

Some of the information made available online by the state indicates that SS 25 has 7" casing set at 2398 feet and elsewhere in a Well Cementing Summary indicates that SS-25 has 7" casing set at 8585 feet and cemented back to 6960 feet. The well is reported to also have 5-1/2 inch sent at 8748' (uncemented). However, Enclosure 3C indicates that the wellhead is attached to 11-3/4 inch surface casing that is mentioned nowhere else that I can find, nor is there any mention if this casing string is cemented. So anyway, trying to get a handle on the well construction. Thought that maybe the workover stuff in 3D might mention actual well construction, but if it's that large, must cover a ton of other stuff that I don't need.

So if you can find a well schematic or well completion report, etc. that documents the actual construction of SS-25, that's what I'm looking for.

I was disappointed to see that Exhibit 3E was just out of their SOP manual rather than the actual MIT methodology used on the SS-25. Also ironically details the subsurface valve installation and maintenance for the subsurface valve that was reportedly removed from SS-25 in 1979. Anyway, I'll wade through the SOP to see if they detail mechanical integrity testing methodology.

Thanks again for all your assistance!! Frank

Frank Brock

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New York, NY 10007
brock.frank@epa.gov
Office: (212) 637-3762
Fax: (212) 637-4211

From: Johnstone, Jeremy
Sent: Wednesday, January 13, 2016 6:56 PM
To: Brock, Frank <Brock.Frank@epa.gov>
Subject: FW: Aliso Canyon Gas Leak - Information Request - CONTAINS CBI - 2nd of 2 parts

Ex. 3.D attached, at 60mb, is too large to send via email. Please advise.

Jeremy Johnstone
Environmental Engineer
Emergency Prevention and Preparedness Section (Mail Code SFD-9-3)
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75 Hawthorne Street
San Francisco, CA 94105
Tel: 415-972-3499
Cell: 415-816-6584
email: johnstone.jeremy@epa.gov

From: Johnstone, Jeremy
Sent: Wednesday, January 13, 2016 3:27 PM
To: Brock, Frank <Brock.Frank@epa.gov>
Subject: RE: Aliso Canyon Gas Leak - Information Request - CONTAINS CBI

See attached, as requested. Again, SoCalGas has made a claim of CBI over the attached, therefore please handle accordingly.

Regards,
Jeremy

Jeremy Johnstone
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75 Hawthorne Street
San Francisco, CA 94105

Tel: 415-972-3499
Cell: 415-816-6584
email: johnstone.jeremy@epa.gov

From: Brock, Frank
Sent: Tuesday, January 12, 2016 2:26 PM
To: Johnstone, Jeremy <Johnstone.Jeremy@epa.gov>
Subject: RE: Aliso Canyon Gas Leak - Information Request - CONTAINS CBI

Thanks-this confirms some of the info I had found on the 'net. I think the following would be of most use to us:

- Response to EPA Request 3c: but they indicate that will be provided in the future.
- Response to EPA request 3d: Exhibit 3d detailing dates and procedures of well workovers.
- Response to EPA request 3e: Exhibit 3e details the mechanical integrity program for the well.

So if Exhibits 3c (when you receive it), 3d and 3e are not too voluminous, if we could get copies of those exhibits, it may answer all our questions. Thanks again for your assistance!!

P.S.: See where they had Boots and Coots on the well trying to kill it. As they are one of the best well control outfits around from my experience in the industry, bad news that they couldn't kill it! Hope relief well #1 gets down sooner rather than later! Frank

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brock.frank@epa.gov
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Sent: Tuesday, January 12, 2016 4:49 PM
To: Brock, Frank <Brock.Frank@epa.gov>
Subject: Aliso Canyon Gas Leak - Information Request - CONTAINS CBI

Frank –

As we discussed attached please find copies of:

- Region 9's 18 December Information Request letter to the Southern California Gas Co. regarding the natural gas leak at its Aliso Canyon Gas Storage Area
- SoCalGas 31 December response transmittal letter

As I informed you, please be advised that **SoCalGas has made a claim of CBI over the entire contents of that letter**, as well as the attachments that the letter references. Therefore please handle the letter accordingly.

After you have reviewed the two letters, let me know if there are additional specific materials that you would be interested in seeing.

Also, as I told you over the phone, if you have any questions about regulation of underground gas storage fields under CAA Section 112(r), you can speak with either Francesco Maimone and/or Ellen Banner - both are in Region 2.

I hope this help.

Regards,
Jeremy

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Cell: 415-816-6584
email: johnstone.jeremy@epa.gov

Proboszcz, Angie

From: Brock, Frank
Sent: Wednesday, January 20, 2016 12:38 PM
To: Johnstone, Jeremy
Subject: RE: Aliso Canyon Gas Leak - Information Request - CONTAINS CBI - 2nd of 2 parts

Follow Up Flag: Follow up
Flag Status: Flagged

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Cell: 415-816-6584
email: johnstone.jeremy@epa.gov

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



United States Environmental Protection Agency

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

From: Barboza, Tony [<mailto:Tony.Barboza@latimes.com>]
Sent: Thursday, January 14, 2016 12:35 PM
To: Mogharabi, Nahal <MOGHARABI.NAHAL@EPA.GOV>
Subject: RE: Aliso Canyon

Hi Nahal,

Happy new year too. Thanks for this update.

Can you provide the files and documents the gas company has submitted in response to EPA's Dec. 18 information request? I'd rather not have to FOIA it if possible, but please let me know.

Thanks,

Tony

From: Mogharabi, Nahal [<mailto:MOGHARABI.NAHAL@EPA.GOV>]
Sent: Thursday, January 14, 2016 12:25 PM
To: Barboza, Tony
Subject: RE: Aliso Canyon

Hi Tony,

Happy New Year! Thanks for checking in. Regarding EPA's involvement, below is the latest.

U.S. EPA is participating in daily operational calls with these local and state regulators and Southern California Gas Company to stay abreast of developments in controlling the gas release and assisting local residents. On Dec. 18, U.S. EPA Region 9 sent a federal Clean Air Act information request letter to Southern California Gas Company (attached) for additional data and documents related to the facility and its operation. EPA is currently reviewing the information submitted and expects to receive additional information from the company in coming days. After completing its review of this information and in consultation with the state and local regulators already active on the scene, EPA will determine the appropriate next steps.

As you know, California state and local agencies are on the forefront of the response to the Aliso Canyon natural gas leak. They include the California Office of Emergency Services (Cal OES), California Division of Oil, Gas and Geothermal Resources (DOGGR), the South Coast Air Quality Management District, the County of Los Angeles Fire and Public Health

Departments, the City of Los Angeles, California Public Utilities Commission (CPUC), California Air Resources Board (CARB), California Energy Commission (CEC), Division of Occupational Safety and Health (Cal/OSHA), and the Office of Environmental Health Hazard Assessment (OEHHA). Please see the California Office of Emergency Services website for the latest information: (<http://www.caloes.ca.gov/ICESite/Pages/Aliso-Canyon.aspx>).

I can keep you posted as we have more information to share.

Hope all is well. Best,

Nahal

From: Barboza, Tony [<mailto:Tony.Barboza@latimes.com>]

Sent: Thursday, January 14, 2016 9:36 AM

To: Mogharabi, Nahal <MOGHARABI.NAHAL@EPA.GOV>

Subject: Aliso Canyon

Hi Nahal,

Would you have a moment to discuss U.S. EPA's role in the response to the Aliso Canyon gas leak? I haven't heard much and would just like to understand the scope of the agency's involvement.

Thanks and best regards

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United States Environmental Protection Agency

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Proboszcz, Angie

From: Meer, Daniel
Sent: Thursday, January 07, 2016 11:57 AM
To: Johnstone, Jeremy
Subject: old briefing paper on AC
Attachments: Aliso Canyon Briefing Paper.docx

Follow Up Flag: Follow up
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Briefing Paper

Southern California Gas Company Methane Gas Release

Aliso Canyon Natural Gas Storage Facility

21 December 2015

Overview: On 23 October 2015, an uncontrolled natural gas release was discovered at the Southern California Gas Company (SoCal Gas) Natural Gas Storage Facility at Aliso Canyon, an old oil field in the northern San Fernando Valley, Los Angeles County. SoCal Gas injects natural gas into abandoned oil reservoirs for storage and then withdraws the gas for transmission and sale. SoCal Gas is a subsidiary of Sempra Energy Utilities.

The Aliso Canyon storage facility contains 115 gas withdrawal/injection wells and the well that is leaking, Well SS 25, is over 8000 feet deep. Aliso Canyon has a total storage capacity of 86 bcf (billion cubic feet), one of the largest natural gas storage facilities in the United States.

Porter Ranch, an affluent residential community of approximately 30,000 people, is located near the Aliso Canyon storage facility. The nearest Porter Ranch residents that are being affected live approximately 1 mile away and 1200 feet below the leaking wellhead.

Current Status: SoCal Gas is the responsible party and is attempting to plug the leaking well, with a team of well control contractors. The geology of the area is complex and has complicated the well kill effort. SoCal Gas's response thus far is on two fronts: attempts to kill the well from the top and drilling relief wells to kill the well from the bottom. SoCal has 157 people in their Incident Action Plan, working on this relief effort.

Top Kill Efforts: SoCal Gas has attempted multiple 'top kill' operations on SS 25, none successful. They are concerned about top kill efforts degrading the integrity of the well bore, so they are cautious with their operations. The next top kill effort will be a so called 'junk shot', that pumps material such as ball bearings in heavy mud down the wellbore, in an attempt to stop the flow of gas. The next top kill operation is scheduled for 23 December, at the earliest.

Relief Wells: SoCal Gas is drilling two relief wells. The first relief well is at approximately 3800 feet and the second relief well is scheduled to spud on 22 January 2016. The relief well, if successful, will intercept the bottom of the leaking well and pump in cement. This technique has had great success in controlling blow outs. The drilling operation continues around the clock and the relief wells are estimated to take 3-4 months to complete.

Environmental and Public Health Issues: Estimates of how much methane is leaking are not particularly reliable but are reported to be on the order of 2-3 million pounds per day.

Measurements of methane in nearby residential areas show levels that are substantially below the flammability limit and that do not represent an acute health risk. However, exposure to the mercaptan odorant additive in the natural gas can produce symptoms such as nausea, headaches, vomiting, abdominal discomfort, respiratory irritation and dizziness and residents have reported effects that are consistent with short term mercaptan exposure. The LA County Department of Public Health has determined that the emissions from this incident are causing health effects to some Porter Ranch residents and is requiring that SoCal Gas provide temporary relocation (see below).

Regulatory Actions: State and local regulatory agencies and jurisdictions are involved with the response to this methane leak.

State Agencies:

Division of Oil, Gas and Geothermal Resources (DOGGR), Department of Conservation, Natural Resources Agency;

California Public Utility Commission (CPUC);

California Office of Emergency Services (OES);

California Environmental Protection Agency (Cal/EPA).

Local Agencies:

Los Angeles County Certified Unified Program Agency (LA County CUPA)

Los Angeles County Fire/HazMat

City of Los Angeles

South Coast Air Quality Management District (SCAQMD)

Los Angeles County Department of Public Health

DOGGR has issued two orders to SoCal Gas, to provide information on the leaking well (18 November) and to develop plans for expeditiously capturing the escaping gas, stopping the leak and communicating with state and local regulators (10 December). The 10 December order includes the convening of experts from the national laboratories (Lawrence Berkeley, Lawrence Livermore and Sandia) to review data and assist DOGGR in evaluating SoCal Gas's plans for stopping the leak.

The CPUC is conducting an investigation to assess SoCal Gas actions before and after the well failure that resulted in the methane gas release. This includes public notification and issues related to operation and maintenance of the storage facility. CPUC has requested information from SoCal Gas and, in coordination with DOGGR, directed SoCal Gas to hire an independent, third party to conduct a root cause analysis of the well blow out.

The Los Angeles County Department of Public Health ordered SoCal Gas to provide temporary relocation to residents. As of December 1st, 778 households had either relocated (282) or were in the process of relocating (496). SoCal Gas has established a community center in Porter Ranch to answer questions and assist residents with temporary relocation and claims.

The Los Angeles City Attorney announced a lawsuit against SoCal Gas for its handling of the methane leak and the SCAQMD has cited SoCal Gas for a public nuisance due to the odors from the mercaptan additive.

Cal/EPA has contacted the Interagency Modeling and Atmospheric Assessment Center (IMAAC) for possible assistance in modeling the methane dispersion. IMAAC is a federal interagency with expertise in plume and atmospheric modeling.

Federal Actions:

The Region is participating in daily operational calls and providing daily summaries. On 15 December two on-scene coordinators participated in a site tour with the Los Angeles County Fire and Hazardous Materials Unit and representatives from Lawrence Livermore National Laboratory.

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On 18 December the Region issued an information request to SoCal Gas pursuant to the Clean Air Act Section 114.

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